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College Student Receptiveness to Various Alcohol Treatment Options

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Abstract

Objective—Heavy episodic drinking remains a significant problem on college campuses. Although most interventions for college students are behavioral, pharmacological treatments, such as naltrexone, could provide additional options.

Participants—The authors evaluated receptivity to various alcohol treatment options in a general population of college student drinkers ($N = 2,084$), assessed in 2005.

Methods—The authors asked participants to indicate which of 8 treatment options (ie, self-help book, self-help computer program, self-help group, group therapy, individual therapy, monthly injection, targeted oral medication, or daily oral medication) they would be willing to consider if they were going to cut down on or stop drinking.

Results—Over 50% of drinkers expressed receptiveness to self-help options or psychotherapy options, and over 25% of drinkers expressed receptiveness to medication options.

Conclusions—Increasing treatment options for students interested in reducing or stopping drinking by offering pharmacological interventions such as naltrexone could provide an important unmet need among college students.

Keywords

alcohol; alcohol treatment; college health; psychotherapy; self-help

College student drinking remains a significant problem on campuses across the nation. It is estimated that 38%-44% of college students report drinking 5 (4 for women in some studies) or more drinks on 1 occasion (often defined as *binge drinking*) in a 2-week period.^{1,2} Researchers have shown heavy episodic drinking and other forms of problematic drinking to

be related to significant alcohol-related social, legal, and physical problems in college students including academic difficulties, drunk driving, injuries, and unintended death.¹⁻³

Although young adults are more likely than other age groups to report a substance use disorder, they are also unlikely to seek treatment or perceive a need for treatment.^{4,5} When they do perceive a need for external help with their drinking, they typically seek help from friends or school counselors.⁶ Indeed, even those students who recognize that they have a substance problem prefer to moderate their substance use on their own.⁷⁻¹⁰ Although it is clear that most individuals are able to resolve drinking problems without formal treatment,¹¹⁻¹³ many are unable to do so, and, therefore, the availability of a range of formal treatment options is highly desirable.

It is particularly important to reach out and educate college students about their options given the high rates of hazardous drinking and drinking problems in this population and the reticence of adolescents and young adults to embark on treatment strategies that may be perceived as onerous or stigmatizing.^{8,10,14} Additionally, given the frequent involvement of college student drinkers with the legal system and college authorities, students mandated to treatment may benefit from a greater variety of available treatments. Kelly et al¹⁵ found that mandated patients actually showed as much, if not more, improvement in their substance abuse problems as did voluntary patients.

At present, there are a range of different treatment options available for alcohol use disorders. Most widely used are self-help programs like Alcoholics Anonymous.¹⁶ Primary care providers and medical management are also useful, especially with combined behavioral intervention or medication.¹⁷ Naltrexone, as an oral medication, has been shown to be an effective pharmacological treatment for alcohol dependence, reducing cravings for alcohol, alcohol intake, and the risk for relapse after treatment.^{18,19} Existing data suggest that naltrexone is most useful for people with high levels of craving, family history of alcoholism, history of other substance abuse, dependence onset before the age of 25 years, and early problem drinkers,²⁰⁻²⁴ which makes it particularly promising as a treatment for college students. Until recently, naltrexone was often ineffective because of noncompliance, but a new intramuscular extended release form of the drug (administered as a monthly injection) provides an alternative approach to medication management.^{25,26} Given that much of the problematic drinking that occurs among college students is episodic heavy drinking and significantly more college students are interested in reducing their drinking versus abstaining from it, intramuscular or targeted oral naltrexone treatment may be particularly suitable for use in college populations. Intramuscular naltrexone may be of interest to college students because of the minimal behavioral commitment necessary to be compliant with treatment and because it doesn't preclude the possibility of thinking. Targeted, occasion-specific dosing of naltrexone, also a newly emerging treatment approach, may be a particularly useful strategy for college students who tend to drink on an episodic basis and may be willing to undertake treatment that provides a high degree of flexibility and choice regarding commitment to reduced drinking. In a study by Kranzler et al,²⁷ subjects taking targeted naltrexone or targeted placebo experienced 14% fewer drinking days than did those taking daily naltrexone or daily placebo. There was also a 24% reduction in heavy drinking in the targeted conditions, suggesting that targeted medication would be a useful strategy for reducing heavy drinking.

Despite the increasing availability of alcohol prevention and treatment options on college campuses, rates of heavy episodic drinking remain high,²⁸ suggesting a need to expand the current pool of intervention options. The present study was designed to assess the receptivity of a general population of college students to various alcohol treatment options, including some not typically available or offered. This information has considerable clinical utility with respect

to targeting students for intervention and especially to developing comprehensive treatment services and determining how to educate potential consumers about different treatment options.

Methods

Sample

Participants ($N = 2,084$) were part of an ongoing prospective study of college student drinking and health-related behaviors. The original sample ($N = 3,720$, 88% of 1 incoming freshmen class) was recruited prior to the freshman year of college during the summer orientation of 2002 (wave 0; M age = 18 years, $SD = 0.37$) and received follow-up surveys through the Internet once per semester (waves 1–8). Retention of participants over the 4-year study was good (over 80% of the original participants completed at least 2 subsequent assessments). Attrition analyses suggest that men and heavy drinkers were more likely to drop out of the study than were women.²⁹ The analyses for this study include items primarily ascertained at wave 6 (spring semester of 2005 during the participants' junior year; exceptions are subsequently noted). Participants were included in the analyses if they reported drinking alcohol during the past 3 months (310 abstainers were excluded from the 2,394 participants who completed wave 6). The participants (M age = 21 years, $SD = 0.46$) who completed Wave 6 were predominantly Caucasian (90%), with fewer men than women (61%). This study was approved by the University of Missouri–Columbia Campus Institutional Review Board, and all participants gave written consent at baseline.

Measures

Receptiveness to Alcohol Treatment Options—We developed 3 original questions to assess receptiveness to various alcohol treatment options. The first question was: “Which ones of the following would you consider if you were wanting to cut down on or stop drinking? (check all that apply). I would consider ...” Response options included the following: “self-help book”, “computer-based self-help program”, “self-help group”, “group with a therapist/counselor”, “individual therapist/counselor”, “antidrink medication that was administered by injection once per month”, “antidrink medication to take only on days when I might drink”, and “antidrink medication to take every day.” Stability coefficients for each of these items are included in the Results section. In addition to the first question, participants were asked to rate (1) how much they would like to cut down on their drinking and (2) how much they would like to stop drinking on 7-point Likert-type scales ranging from 1 (*not at all*) to 7 (*definitely*). For these analyses, the cut down and stop variables were dichotomized to indicate whether the participant was *maybe* to *definitely* interested (> 4 coded as 1) or *not at all* to *maybe* interested (< 4 coded as 0) in cutting down or stopping drinking.

Alcohol Consumption—For heavy drinking, we created a composite by taking the mean of the ordinal response options for 3 variables: frequency of getting high from alcohol, getting drunk, and consuming 5 or more drinks on 1 occasion in the past 30 days ($\alpha = .92$; correlation with alcohol dependence symptoms, $r = .60$, $p < .001$). For the purposes of this study, the heavy-drinking composite was standardized to make odds ratios easier to interpret. In addition, we included a measure of the frequency of consuming 12 or more drinks on 1 occasion and the maximum number of drinks consumed on 1 occasion, both in the past month.

Alcohol Dependence Symptoms—We used a proxy measure of current (past 3 months) *DSM-IV* alcohol dependence to assess dependence symptoms. This proxy was previously developed using combinations of alcohol consequences items to approximate each of the *DSM-IV* dependence criteria and appears to have adequate reliability and validity.³⁰ For these analyses, a symptom count was computed for each participant (range = 0–7).

Drinking Motives—Reasons for drinking were measured at waves 0, 1, 3, and 5 using 20 items taken from the Drinking Motives Questionnaire, a multidimensional assessment of drinking motives that has been shown in prior research to have excellent reliability and construct validity.³¹ Items were used as indicators of 4 latent factors: social, coping, enhancement, and conformity reasons for drinking. To minimize the impact of missing data on analyses, we used the most recent drinking motives assessment that was completed prior to the receptiveness to treatment options assessed at wave 6 (89% of wave 6 [spring semester 2005] participants had completed the drinking motives assessment at wave 5 [fall semester 2004], 3 months earlier).

Reasons for Abstaining or Limiting Drinking (RALD)—We assessed RALD using 24 items, 17 from Greenfield et al³² and 5 additional items adapted from the broader literature.^{33–36} Participants were told, “We would like to know how much importance you attach to these reasons as to why you may limit or abstain from drinking alcohol.” Response options included *not at all important*, *fairly important*, *very important*, and *not applicable* in limiting drinking or not drinking. For these analyses, *not applicable* and *not at all important* were collapsed, resulting in a 3-category, ordinal scale in which 0 was *not applicable* or *not at all important*, 1 was *fairly important*, and 2 was *very important*. On the basis of earlier work examining the factor structure of these items, we included 3 factors of RALD in these analyses: upbringing ($\alpha = .76$), negative consequences ($\alpha = .78$), and perceived costs ($\alpha = .72$).³⁷ For the purposes of our study, the RALD composites were also standardized to make odds ratios easier to interpret.

Results

Approximately 15% of drinkers in our sample (19% of men vs 12% of women, $p < .0001$) were interested in cutting down on their drinking, and 5% expressed interest in stopping drinking (7% of men vs 4% of women, $p < .05$; see Table 1). These results suggest a nontrivial proportion of college student drinkers are potential consumers of alcohol treatment services. When asked, hypothetically, about their receptiveness to specific treatment options, students expressed the most receptivity to individual therapy (35%), followed by self-help books (24%) and self-help groups (19%). Although receptiveness to pharmacological treatment was lower, there was clearly some receptivity to this option, especially if the medication was targeted to days when the student intended to drink. Indeed, overall receptivity to targeted oral medication (13%) was slightly higher than for self-help computer programs (10%, $p = .0192$), a treatment modality that currently is getting considerable attention as Web-based interventions continue to be disseminated.³⁸ It is important that a targeted dosing regime was viewed much more favorably than the dosing strategies recommended for current FDA-approved available medications (approximately 6% for both daily dosing and monthly injections; see Table 1). With the exception of self-help computer-based treatment, women were more receptive to nonpharmacological treatment options than were men (all $ps < .05$), but there were no sex differences in receptivity to pharmacotherapy options (see Table 1). These findings are consistent with the broader literature on sex differences in help-seeking and probably reflect increased willingness to seek mental health services among women.³⁹ After controlling for alcohol-related variables and motives, men were at decreased odds of endorsing self-help books and individual psychotherapy only (see Table 2).

To evaluate whether the intensity of drinking behavior and motives for use or moderation/abstinence were related to receptivity to various treatment options, we computed both univariate and multivariate logistic regression analyses. Participants who reported less heavy drinking and fewer maximum drinks were at increased odds of endorsing various alcohol treatment options including self-help books, self-help groups, group treatment, and individual treatment, but not targeted and daily oral medications. However, the majority of univariate

associations between alcohol-consumption variables and dependence symptoms in predicting treatment endorsement did not remain significant in the multivariate models (see Table 2). The overall predictability of receptiveness to various treatment options in both univariate and multivariate models was modest (on the basis of measures of fit), despite the fact that 5 of the 8 multivariate models were significant.

To gauge the clinical relevance of our survey, we stratified participants on the basis of level of dependence (ie, none, subthreshold, and suprathreshold) for those drinkers who expressed a desire to cut down or stop drinking and examined rates of receptiveness to various alcohol treatment options. These data, displayed in Table 3, highlight several important phenomena. First, although the majority of individuals who express an interest in cutting down or stopping drinking report some degree of dependence, not all of those who contemplate cutting down or stopping show clear signs of dependence. Second, a large proportion of those interested in cutting down (68%) or stopping (69%) are receptive to psychosocial interventions. Although pharmacotherapy is clearly a less popular option than nonpharmacological approaches, there appears to be a reasonable proportion of drinkers interested in cutting down (18%) or stopping (12%) their drinking using a pharmacological approach. Among drinkers evidencing dependence symptoms, 8% (21 of 256) of those interested in cutting down and 5% (4 of 83) of those interested in stopping were exclusively receptive to medications. That is, there are small but important subgroups of individuals both interested in cutting down and stopping their drinking who indicate that they would be receptive to 1 or more of the 3 medication regimes but not to any of the 5 nonpharmacological approaches listed in the survey. Finally, although a large majority of individuals who expressed an interest in cutting down (75%) or stopping (72.5%) indicated receptivity to 1 or more of the treatment options listed, a large proportion of both groups indicated a lack of receptiveness to available treatment strategies. Given that most individuals who recover from alcohol use disorders do so without formal treatments,^{11–13} the failure to obtain 100% rates for acceptability for existing treatments may not be as problematic as it superficially might appear.

Using data from wave 7 (fall semester 2005), 7 months after wave 6 (spring semester 2005), we examined the stability of receptiveness to various alcohol treatment options over time. Results suggest low to moderate stability in receptiveness with kappas for each of the 8 treatment options ranging from .16 to .30 ($Mdn = .245$, all $ps < .001$). Self-help computer program had the lowest stability, and individual psychotherapy had the highest. These findings indicate that although there is some degree of stability of receptiveness to various treatment options, presumably reflecting stable values and preferences of drinkers, receptiveness to treatment alternatives appears to be a somewhat dynamic process, and that receptiveness can change over time, presumably as a function of current knowledge and situations facing the drinker.

Comment

Limitations

An important limitation of the current study is the wording of the directions for the receptiveness to treatment items that ask, “If you were hypothetically interested in reducing your drinking, would you be interested in a set of options?” Because the question is hypothetical in nature, we cannot be certain that rates obtained in this study would hold when applied to a treatment-seeking population. This concern is somewhat mitigated by our supplementary analyses (see Table 3) that examined receptiveness to treatment options as a function of interest in cutting down or stopping drinking and level of drinking pathology, as indexed by alcohol dependence symptomatology. Still, although the measure is face valid, establishing the predictive validity of these types of measures remains an empirical issue. In addition, no details

were provided about the risks and benefits of the treatment options provided. In actual practice, this information would be expected to influence receptivity to different therapies.

The survey specifically asked about 8 different forms of treatment (5 psychosocial treatment approaches, 3 pharmacologic approaches), in relatively general terms. Given the level of knowledge about specific forms of treatment that might be expected in a college student population, we assumed that it would not be fruitful to ask about more specific types of theoretical approaches (eg, cognitive-behavioral treatment vs motivational/feedback approaches; Alcoholics Anonymous vs Rational Recovery), given that this would likely be beyond the ability of most students to accurately discriminate. However, some students might have strong preferences regarding theoretical approaches, and we were not able to resolve this level of preference with our questionnaire. Future studies investigating treatment receptiveness could include more detailed descriptions of different pharmacological and psychosocial treatment approaches.

Last, although our sample was large and representative of many types of campuses that experience heavy drinking, it is only 1 campus, and our sample was composed primarily of while students of European descent. Consequently, we would be reluctant to generalize the prevalence estimates of different types of preferences to any other single campus. However, we strongly expect the general findings—that students find a wide range of treatment options acceptable and that students vary in the kinds and numbers of different treatment options they may be willing to consider—to be generally relevant.

Conclusion and Recommendations

Many college student drinkers express an interest in either cutting down their drinking or stopping altogether, but no single treatment option was viewed as desirable by a majority of participants. Both self-help and formal psychotherapy approaches were viewed relatively favorably, and approximately two-thirds of those wishing to change their drinking endorsed 1 or more nonpharmacological treatment approaches as a viable option. However, despite the fact that antidrinking medications are not widely promoted or available to college students, a minority of students found such approaches acceptable, and approximately half of these individuals did not see psychosocial treatments as acceptable. These findings support a potential role for medications in the treatment of problematic drinking in college students (and presumably other young adults). Additionally, pharmacotherapy lends itself to a variety of regimes (eg, targeted dosing, daily dosing, depot injection) that can be tailored to individuals with different drinking goals who vary in their ability to comply with different dosing regimes.

A clear implication of our findings for college student health personnel is that students are open to a wide range of treatment options and that there appear to be individual differences in the range of treatment options that a given student might find acceptable. To optimize treatment effectiveness, student health services can be organized to provide a range of therapeutic services for drinking problems that takes into account both the known evidence base for effectiveness^{40,41} and the personal preferences of patients. We note, however, that medications are typically prescribed in some type of therapeutic context, even if only minimal (eg, brief follow-up and encouragement in primary care⁴²). However, the effectiveness of minimal interventions (eg, physician advice⁴³) indicates that intensive interventions are not a prerequisite for effectiveness.

One unique aspect of this survey was our inclusion of recently emerging forms of drug administration in pharmacotherapy for alcohol problems, such as extended release injections and targeted dosing, which are currently being used with naltrexone, as the evidence base for new pharmacotherapeutics is constantly expanding.⁴⁴ Given that the majority of problematic drinking that occurs among college students is episodic and significantly more college students

are interested in reducing their drinking versus abstaining from it, treatments such as targeted oral naltrexone may be particularly suitable for use in college populations and may meet an important but unmet need for student drinkers who tend to see such a regimen as more appealing than current standard practice. Such an approach is also more economically viable for various treatment centers and consumers because of the relatively low cost of targeted dosing. College health providers should consider expanding their range of treatment to include these novel and emerging approaches. The ultimate effectiveness of extending pharmacotherapy, an evidenced-based approach, to college treatment settings is an empirical issue. However, it is clearly one that warrants further evaluation.

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TABLE 1
Frequency of Interest in Cutting Down or Stopping Drinking and Receptiveness to Treatment Options and Means for Alcohol Consumption Variables, by Sex

Variable	Men (<i>n</i> = 797 ^a)			Women (<i>n</i> = 1,287 ^a)			Total (<i>N</i> = 2,084 ^a)		
	%	<i>n</i>	<i>M</i>	<i>SD</i>	%	<i>n</i>	<i>M</i>	<i>n</i>	<i>SD</i>
Interest in cutting down ^b	19.4	150			11.6	146		296 ^{***}	
Interest in stopping ^b	6.9	53			4.5	56		109 [*]	
Receptiveness to different alcohol treatment options									
Self-help book	17.8	142			27.4	353		495 ^{***}	
Self-help computer program	10.7	85			10.4	134		219	
Self-help group	16.7	133			20.4	262		395 [*]	
Group therapy	13.2	105			18.4	237		342 ^{**}	
Individual therapy	27.5	219			39.0	502		721 ^{***}	
Monthly injection	5.5	44			6.5	84		128	
Targeted oral medication	11.9	95			13.2	170		265	
Daily oral medication	6.9	55			6.1	78		133	

Variable	Men (<i>n</i> = 797 ^a)			Women (<i>n</i> = 1,287 ^a)			Total (<i>N</i> = 2,084 ^a)					
	%	<i>n</i>	<i>M</i>	<i>SD</i>	%	<i>n</i>	<i>M</i>	<i>SD</i>	%	<i>n</i>	<i>M</i>	<i>SD</i>
Heavy-drinking composite ^c			2.0	1.3			1.4	1.2			1.7	1.3***
Dependence proxy symptom count (range = 0–7)			1.7	1.8			1.3	1.5			1.5	1.6***
Past-month frequency of ≥ 12 drinks on 1 occasion ^c			1.0	1.3			0.2	0.7			0.5	1.1***
Past-month maximum drinks on 1 occasion			9.3	6.3			5.8	4.2			7.1	5.4***

^a *ns* for cutting down, stopping, and the alcohol consumption variables may be slightly smaller because of randomly missing data.

^b Interest in cutting down or stopping drinking was measured on a 7-point Likert scale from 1 (*not at all*) to 4 (*maybe*) to 7 (*definitely*); responses were dichotomized such that *maybe* to *definitely interested* (4–7) was coded as 1, and all other values (1–3) were coded as 0.

^c The heavy-drinking composite is an average of 3 variables: the past-month frequency of getting high, getting drunk, and drinking 5 or more drinks on 1 occasion. The heavy-drinking composite as well as the past-month frequency of drinking 12 or more drinks on 1 occasion was measured on an 8-point Likert-type scale ranging from 0 (*not in the past month*) to 7 (*every day*).

* $p < .05$.

** $p < .01$.

*** $p < .001$.

TABLE 2
Odds Ratios From a Multivariate and Univariate Logistic Regression Predicting Receptiveness to Various Alcohol Treatment Options Among Drinkers (N = 2,084)

Variable	Self-help hook		Self-help computer program		Self-help group		Group therapy		Individual therapy		Monthly injection		Targeted oral medication		Daily oral medication	
	M	OR	M	OR	M	OR	M	OR	M	OR	M	OR	M	OR	M	OR
Sex (1 = male, 0 = female)	0.60***	0.57***	1.07	1.03	0.85	0.78*	0.89	0.67**	0.75*	0.59***	0.77	0.84	0.98	0.89	1.20	1.15
Alcohol-use variable																
Dependence proxy symptom count	0.92	0.95	0.94	0.97	1.04	0.97	1.10	1.03	1.07	0.98	1.04	1.03	1.13*	1.10*	0.99	1.03
Heavy-drinking composite ^a	1.03	0.95	0.89	0.93	0.83*	0.88**	1.08	0.95	0.94	0.90**	0.82	0.98	0.98	1.05	1.01	1.11
Past-month frequency of > 12 drinks on 1 occasion ^a	0.99	0.89*	1.09	0.99	1.03	0.93	1.00	0.85	0.93	0.81***	1.19	1.02	0.91	0.96	1.08	1.16*
Past-month maximum drinks on 1 occasion	1.01	0.99	1.00	0.99	1.00	0.98*	0.95*	0.97**	0.99	0.97***	0.99	1.00	1.00	1.00	1.00	1.03
Interest in cutting down ^b	1.10	1.07	1.06	1.12*	0.92	0.96	0.92	0.96	0.96	0.95	0.94	0.97	0.88	0.95	0.79*	0.94
Interest in stopping ^b	1.06	1.04	1.25*	1.22***	1.17	1.07	0.97	0.97	1.00	0.93	1.01	0.94	0.93	0.91	1.07	0.95
Drinking motive																
Conformity	0.99	0.99	1.03	1.03	1.00	0.99	1.03	1.02	0.98	0.97*	0.99	1.01	1.00	1.02	0.98	1.00
Coping	1.01	1.00	1.00	1.00	1.01	0.99	1.00	1.00	1.00	0.99	1.04	1.05*	1.04	1.05***	1.06*	1.06*
Enhancement	1.02	0.99	1.01	0.99	1.03	0.98	1.03	1.01	1.03	0.99	1.04	1.05	1.01	1.05*	0.99	1.02
Social	0.96	0.98	0.99	0.99	0.96	0.96*	0.98	1.00	0.96*	0.98	1.02	1.05	1.02	1.05*	1.00	1.03
Abstention motive																
Upbringing	1.02	1.05**	0.99	1.05	1.00	1.04	0.95	1.02	0.95	0.99	0.97	1.04	0.99	1.00	0.97	1.03
Negative consequences	0.97	1.02	0.98	1.03	1.00	1.01	1.03	1.02	1.04	1.01	1.06	1.07	1.07	1.05	1.16*	1.08*
Perceived costs	1.05	1.08***	1.05	1.06*	1.03	1.06**	1.06*	1.07***	1.05*	1.05**	1.01	1.05	1.02	1.03	1.00	1.03
Model fit statistics																
Multivariate χ^2	39.1***		18.8		24.5*		27.1*		42.1***		12.8		26.0*		20.1	
Percentage concordant	59.3		57.5		58.0		58.7		58.6		58.0		58.9		60.7	
c statistic	0.60		0.59		0.59		0.59		0.59		0.59		0.60		0.62	

Note. Multivariate (M) odds ratios (ORs) are from models including all variables simultaneously. U = univariate.

^aThe heavy-drinking composite is an average of 3 variables: the past-month frequency of getting high, getting drunk, and drinking 5 or more drinks on 1 occasion. The heavy-drinking composite as well as the past-month frequency of drinking 12 or more drinks on 1 occasion was measured on an 8-point Likert-type scale ranging from 0 (*not in the past month*) to 7 (*every day*).

^bInterest in cutting down or stopping drinking was measured on a 7-point Likert scale from 1 (*not at all*) to 4 (*maybe*) to 7 (*definitely*); responses were dichotomized such that *maybe* to *definitely interested* (4–7) was coded as 1, and all other values (1–3) were coded as 0.

*
 $p < 0.05$.
**
 $p < 0.01$.

 $p < 0.001$.

TABLE 3
Respondents Receptive to Alcohol Treatment Options, by Number of Alcohol Dependence Symptoms Among Drinkers Who Report Interest in Cutting Down or Stopping Drinking (%)

	Interested in cutting down (number of dependence symptoms)			Interested in stopping (number of dependence symptoms)				
	0 (n = 40)	1-2 (n = 106)	≥3 (n = 150)	Total (n = 296)	0 (n = 26)	1-2 (n = 41)	≥3 (n = 42)	Total (n = 109)
Individual treatment option								
Self-help book	37.5	28.3	23.3	27.0	23.1	31.7	19.1	24.8
Self-help computer program	10.0	16.0	14.7	14.5	15.4	24.4	14.3	18.4
Self-help group	15.0	17.0	18.7	17.6	19.2	22.0	26.2	22.9
Group therapy	12.5	15.1	19.3	16.9	19.2	17.1	16.7	17.4
Individual therapy	35.0	31.1	32.0	32.1	30.8	24.4	26.2	26.6
Monthly injection	0.0	8.5	6.7	6.4	0.0	9.8	4.8	5.5
Targeted oral medication	2.5	12.3	12.0	10.8	11.5	9.8	4.8	8.3
Daily oral medication	0.0	8.5	6.0	6.1	3.9	4.9	2.4	3.7
Composite treatment option								
Any self-help option	45.0	40.6	45.3	43.6	38.5	51.2	52.4	48.6
Any therapy option	42.5	35.9	42.7	40.2	42.3	31.7	35.7	35.8
Any medication option	2.5	21.7	18.7	17.6	11.5	14.6	9.5	11.9
Any self-help or therapy option	77.5	59.4	71.3	67.9	69.2	63.4	73.8	68.8
Any option ^d	77.5	68.9	78.7	75.0	69.2	68.3	78.6	72.5

^aSignificantly correlated with number of dependence symptoms among those interested in cutting down ($r = .13$).