

An Exploratory Assessment of a College Substance Abuse Recovery Program: Augsburg College's StepUP Program

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ABSTRACT. Objective: To describe the academic, life functioning, and drug use outcomes of students who participated in the StepUP recovery program, a college program designed to support sobriety for students recovering from substance abuse. Method: Eighty-three StepUP program students (46 current students and 37 alumni) participated in a survey using a slightly modified version of the Global Appraisal for Individual Needs (Dennis, 1998), which assesses drug involvement, mental health, and other life-functioning domains. In addition, a subset of 20 current students completed a second assessment approximately 6 months after the first. Results: The large majority of both current students and alumni reported that they abstained from alcohol and drug use, and that they regularly attended self-help groups. Perceived personal assets and social support were endorsed at high levels by the respondents, as were screens for mental health problems. Conclusions: Students involved in the StepUP program either currently or

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in the past were largely able to maintain sobriety, as well as a favorable GPA. StepUP students also endorsed a sizeable amount of assets and social support, which espouse the maintenance of sobriety.

KEYWORDS. College, sobriety, recovery programs, drug abuse

INTRODUCTION

The use of chemical intoxicants has been present for centuries and exists among people of many continents, cultures, and religions. The cultivation of cannabis, for example, was first recorded as early as 28 BC, and THC, nicotine, and cocaine have been identified in Egyptian mummies dating as early as 950 BC (Kuhn, Swartzwelder, & Wilson, 2003). Health and social problems from the use of these drugs have also existed for centuries, and recovery from these problems is seldom achieved in a vacuum. Rather, people in recovery seek strength and hope through healthy relationships and within environments that support abstinence. Thus was born the roots of modern recovery programs: the Temperance Movements of the early to mid 1800s, including the American Temperance Society and the Christian Women's Temperance Union, among others ("Temperance Movement," 2007). As these movements proliferated, other coalitions or movements were born, including Alcoholics Anonymous (AA) in the 1930s. Recovery programs have continued to expand and adjust to clinical needs, as currently indicated by the birth of recovery schools on college campuses.

Current research reveals that the rates of binge drinking (defined as consuming five or more drinks in one sitting or in a single occasion) are highest among college-age individuals, peaking at age 21 (SAMHSA, 2004). Approximately one fifth (21.4%) of college-aged people (ages 18–25) are estimated to meet DSM-IV criteria for substance abuse or dependence (SAMHSA, 2004). Furthermore, college students who are enrolled in full-time classes are significantly more likely to engage in alcohol use, binge drinking, and heavy alcohol use (five or more drinks in one sitting on 5 or more days in the past month) than are their same-age peers who are not enrolled in full-time classes (SAMHSA, 2004). These rates suggest that the college environment is not conducive to recovery from drug addiction and would not provide the peer support that is critical to maintaining a sober lifestyle. Thus, a college student working to overcome substance abuse may be facing more recovery challenges from the environment compared to a similar-aged person in recovery who is not attending college.

In response to this situation, the first recovery-based school services in the United States were developed roughly 30 years ago at Brown University (1977; White & Finch, 2006) and Rutgers University (1983; White & Finch, 2006). These services were incorporated as a program within the larger school with the intention of providing confidential and emotionally healthy environments for students experiencing drug use recovery issues and offering social support necessary to sustain sobriety while students continue their higher education (McSharry, 2007). In 1986, Texas Tech University joined this recovery college movement, which was then followed by Rutgers' expansion of the "Recovery College" notion by becoming the first to incorporate recovery housing in 1988, which offered dormitory options exclusively for the students in their recovery program. Since the inception of these pioneering recovery college programs, 11 such programs, as well as 14 recovery high schools, have been developed in the United States.

The StepUP program at Augsburg College became part of the recovery college movement in 1997 (White & Finch, 2006), promoting the sense of "recovery college" by expanding the number of students served and providing holistic services, including not only the maintenance of recovery and peer support, but also general life skills, spirituality, and recreation. Key features of the StepUP program include: (1) drug- and alcohol-free living options, (2) weekly one-on-one and group meetings to discuss recovery and school-related issues, (3) individual sobriety contracts, and (4) drug-free social activities. Four full-time staff members have daily contact with the nearly 60 students served each school year and enrollment in the program is voluntary. Most students choose to enroll in the program for 1 to 2 years and then transition elsewhere as they finish their degrees.

Behavioral contracts are an integral part of the StepUP program, as they promote individual recovery and group cohesiveness. These contracts serve as the foundation of the program and incorporate 17 key behavior requirements, such as attending all AA/NA and mandatory meetings, refraining from visiting high-risk environments (e.g., bars), being a punctual and responsible student, and avoiding gambling. StepUP has also established a student government in which staff-selected members are responsible for reviewing the relevance of contracts, recommending necessary changes, and enforcing violations of student contracts. This type of government allows for peer-initiated accountability and the assurance of a safe and healthy environment.

Despite the existence of recovery schools for nearly three decades, no methodical scientific evaluation has been published. Recognizing the

need for a more thorough and scientific measurement of their recovery school, the Augsburg College StepUP program recruited the Center for Adolescent Substance Abuse Research (CASAR), a research unit within the Department of Psychiatry at the University of Minnesota, to assist in the development and execution of a descriptive study. The aims of this preliminary study were to assess and describe current students and alumni of the StepUP program pertaining to recovery attitudes and progress, mental health, school adjustment, and perceptions of the StepUP program.

METHOD

Participants

A summary of participant characteristics is presented in Table 1. Both current students ($n = 46$) and alumni ($n = 37$) were recruited to participate in this study, resulting in a total sample of 83 participants, nearly all of whom identified themselves as Caucasian (97.6%). Enrollment in the StepUP program required a previous drug treatment experience, a motivation to maintain sobriety, a strong academic record, and favorable entrance exam scores to gain initial acceptance into the greater college. Roughly 65% of the sample was male, and ages ranged from 18 to 32 years, with a mean age of 22.5 years (mean age of current students = 20.8 years, range 18–27; mean age of alumni = 24.5 years, range 19–32). Among current students, 44% were freshmen. Alumni had been enrolled in the StepUP program for an average of 3.8 semesters; 16% did not complete their undergraduate program.

MEASURES

The tool used to evaluate the current and alumni StepUP students was adapted from the existing and psychometrically sound Global Appraisal for Individual Needs (Dennis, 1998). The GAIN, a highly structured interview, is a well-established instrument developed to assess youth drug involvement, mental health and other functioning domains. Added to the study instrument were new items related to perceptions of the StepUP program and to recovery behaviors and attitudes. Measures of recovery assessed perceived personal assets or strengths, as well as relapse-risk associated with work and social environments. Relapse-risk variables were computed

TABLE 1. Background Characteristics of the Study Samples

Item	Current Student (<i>n</i> = 46)		Alumni (<i>n</i> = 37)	
	<i>n</i>	%	<i>n</i>	%
Male	30	65.2	24	64.9
Caucasian	44	95.7	37	100
Highest Level of Education				
Currently enrolled undergrad	45	97.8	11	29.7
Did not graduate from college	1	2.2	6	16.2
Graduated from college	0	0	13	35.1
Enrolled in post-baccalaureate	0	0	6	16.2
Graduated post-baccalaureate	0	0	1	2.7
Married	1	2.2	3	8.1
Employment Status				
Full-time student	23	50.0	3	8.1
Part-time student	2	4.3	0	0
Full-time work	0	0	17	45.9
Part-time work	0	0	4	10.8
Student & work	20	43.5	12	32.4
Stay-at-home parent	0	0	1	2.7
Missing	1	2.2	0	0
In your lifetime, have you:				
Received treatment for a mental/behavioral problem?	32	69.6	29	78.4
Been stopped by police/arrested 5+ times?	17	37.0	11	29.7
	Mean (sd)	range	Mean (sd)	range
Age	20.8 (2.4)	18–27	24.5 (2.9)	19–32
GPA	2.90 (0.8)	.05–4.00	3.40 (0.5)	2.00–4.00

by summing the “most” or “all” responses on a 4-point Likert scale for a set of seven work or social environment variables that measured the frequency of contact with others who use drugs or the frequency of stress-inducing situations that may trigger an urge to return to drug use. For example, items in the work environment scale include, “Of the people with whom you work regularly, how many: (1) were employed or in school full-time; (2) were involved in illegal activity; (3) got drunk weekly or had 5 or more drinks in a day; (4) used any drugs in the past 90 days; (5) shout, argue, and fight most weeks; (6) have ever been in drug or alcohol treatment; and (7) would describe themselves as being in recovery.” Parallel questions

were asked for the social/peer relapse-risk environment. Perceived personal assets were measured by computing a count of positively endorsed items when asked, "Which of the following areas do you consider to be your strengths?" Respondents were shown a list of 10 topics to which they could reply "yes," this area is one of my strengths, or "no," it is not. The areas of strength included "doing well" at work, at school, with family, with friends, at sports or a physical activity, at music or performing arts, at drawing or visual arts, at listening or communicating with others, at problem solving, and at working with computers.

Current students had the opportunity to complete the adapted GAIN during both the fall and spring semesters. All items on the GAIN were modified so they could be completed as a self-administered questionnaire. The fall session questionnaire included a detailed evaluation of current (prior 12 months) level of functioning, mental health, alcohol and other drug use, as well as a history of these same variables. Though the mode of administration of the GAIN was changed to ease the administration process with this sample, the highly structured interview format of the GAIN lends itself to a face-valid adaptation of a self-administered format. Inquiries were also made in regard to challenges and successes with recovery and expectations about the StepUP Program. The spring session version for the current students was similar to the fall assessment except that the time frame for many questions was changed to the prior 6 months.

The alumni questionnaire was retained as structured interview. Items closely followed the fall questionnaire for current students. Additional items were added to assess the alumni's perception of strengths and weaknesses of the StepUP Program.

PROCEDURE

The current students were initially assessed in September 2005 at the conclusion of a regularly scheduled monthly meeting of StepUP students and program staff. CASAR research staff introduced the study and administered the consent form and questionnaire, in accordance with the Augsburg College Internal Review Board (IRB) procedures. Students were reminded that participation was voluntary, that there was no penalty if the student chose not to participate, and that their answers would remain anonymous. Students did not record their names on the questionnaire; rather they recorded a code that was most likely unique to the person but would not disclose their identity (e.g., first portion of home phone number, month

of mother's birth, month of father's birth). In April 2006, current students were again invited to complete the spring questionnaire at the conclusion of the monthly StepUP meeting. For some students, this represented their second (prospective) administration, while for other students this was their first administration of an evaluation questionnaire (i.e., newer students and those who were absent at the fall meeting).

Alumni students were mailed an introductory letter, consent form, and a stamped return envelope by StepUP staff during the fall semester. A volunteer called those who returned their signed consent forms and the interview was administered via telephone. Due to a relatively low response to the first mailing, two additional reminders were sent (one in late fall and the other in early spring). Thus, administration of the alumni interview was conducted over the course of the school year.

STATISTICAL ANALYSES

Because the study's main purpose was to provide a description of current StepUP students and alumni, basic descriptive statistics were primarily used. ANOVA was used to compare the current students with the alumni on various measures to see if the two groups differed and as an initial measurement of program impact (i.e., have alumni remained sober and academically successful in comparison with those still participating in the program?). Finally, a brief prospective analysis was conducted to explore the level of change occurring from the fall assessment to the spring assessment.

RESULTS

The results of the evaluation are organized around two sets of data: the combined baseline sample of current and alumni students ($n = 83$); and the prospective sample ($n = 20$), which comprised the subset of current students who completed both a fall and spring assessment.

BASELINE SAMPLE

Responses to questions related to health and well-being are detailed in Table 2. The overall sample also reported having approximately 3.5

TABLE 2. General Health and Well-Being

Variable	Current Students (<i>n</i> = 46)		Alumni (<i>n</i> = 37)		F
	Mean	sd	Mean	sd	
# of Sources of Stress (range 0–9)	3.9	2.6	3.4	2.5	1.36
# of Physical health problems (range 0–7)	1.0	1.1	1.0	1.7	.03
# of Psychological distress symptoms (range 0–3)	0.4	0.6	0.3	0.6	.17
# of Eating Disorder symptoms (range 0–3)	0.2	0.6	0.1	0.3	2.28
# of Gambling symptoms (range 0–3)	0.9	1.0	0.4	0.8	8.00**
# of Depression-related symptoms (range 0–5)	1.9	1.7	1.0	1.4	6.46*
# of Suicidal symptoms (range 0–3)	0.2	0.4	0.2	0.5	.05
# of Anxiety symptoms (range 0–3)	1.0	1.1	0.7	1.1	2.50
# of Post-traumatic Stress symptoms (range 0–4)	1.3	1.2	1.1	1.2	.73
# of Attention-deficit symptoms (range 0–6)	3.4	1.8	1.7	1.5	21.74***
# of HIV-risk symptoms (range 0–3)	0.7	0.8	0.8	0.8	.01
Total symptom count (range 0–40)	8.7	4.6	5.0	4.8	12.70***

p* < .05; *p* < .01; ****p* < .001.

(of 10 possible) sources of stress in the past 6 months, with current students reporting slightly more sources of stress (3.9 versus 3.4). Although severe physical health problems were not frequently reported, symptoms of mental health problems were prevalent among the sample, with anxiety, depression, posttraumatic stress, and attention-deficit problems being the most frequently endorsed mental health categories. MANOVAs were conducted to correct for multiple-comparison error, and results indicated that current students reported higher symptom counts than alumni students across all mental health problem screens ($F [1,82] = 12.70, p < 0.001$), though the rates for the individual mental health screens were significantly higher for current students only on the gambling problem screen ($F [1,82] = 8.00, p < 0.01$), the depression-related screen ($F [1,82] = 6.46, p < 0.05$), and the ADHD screen ($F [1,82] = 21.74, p < 0.001$).

A summary of responses to the items pertaining to substance use is presented in Table 3. Only nine students (11%) reported using alcohol or other drugs during the prior 6 months, and only two students (2%) met DSM-IV criteria for a current substance use disorder. Among current students, only one student reported using alcohol and other drugs and no student had a current substance use disorder. Current and past students endorsed roughly the same number of substance use disorder symptoms, though current students reported using tobacco significantly more often

TABLE 3. Substance Involvement Data

Variable	Current Students (<i>n</i> = 46)		Alumni (<i>n</i> = 37)		? ³
	<i>n</i>	%	<i>n</i>	%	
Used any alcohol or drugs in past 6 months	1	2.2	8	21.6	7.42**
Meets criteria for Substance Abuse in past 6 months	0	0	1	2.7	1.26
Meets criteria for Substance Dependence in past 6 months	1	2.2	1	2.7	.02
	mean	sd	mean	sd	<i>F</i>
# of Substance Abuse symptoms (range 0–4)	0.1	0.4	0.1	0.4	.04
# of Substance Dependence symptoms (range 0–7)	0.2	1.0	0.2	1.2	.00
# of days tobacco was used over past 3 months (range 0–90)	75.7	29.6	40.6	43.9	10.82**

p* < .05; *p* < .01;*** *p* < .001.

than the alumni (76 days and 41 days, respectively, out of the past 90 days).

We also examined data related to recovery, as shown in Table 4. Current students attended self-help groups more frequently than the alumni (30 days and 17 days, respectively, out of the past 90 days), but reports of assets or personal strength were high for both past and current students, with a mean number of seven assets (out of 10). In addition, both groups of students reported high levels of social support (mean = 7.2 and 7.8 of ten possible support sources, respectively). Alumni reported facing a slightly greater rate of relapse-risk in their present social and work environments than the current students, though this difference was not statistically significant using a MANOVA [$F(1,82) = 0.72, p > 0.05$ and $F(1,82) = 2.32, p > 0.05$, respectively].

Open-ended questions were posed to participants to gain a broader understanding of their reasons for attaining sobriety, as well as the ways the StepUP program assisted in that attainment (as shown in Table 5). Participants were allowed to list multiple reasons, which were then categorized and tallied by two research staff who were blind to the respondent's school grouping (current student or alumnus). Categories were then compared between the two researchers, and any discrepancies were discussed and categorized upon mutual agreement.

TABLE 4. Recovery-related Data

Variable	Current Students (<i>n</i> = 46)		Alumni (<i>n</i> = 37)		F
	mean	sd	mean	sd	
# of Days attended self-help group (AA/NA) over past 3 months (range 0–90)	29.7	19.5	17.0	14.5	10.56**
# of Relapse risk factors at work (range 0–10)	4.2	2.5	3.6	1.9	2.32
# of Relapse risk factors in peer/social environment (range 0–10)	4.7	2.7	5.5	1.8	.72
# of Personal assets/strengths (range 0–10)	7.2	1.7	7.4	1.7	.09
# of Social support (range 0–10)	7.2	2.2	7.8	1.3	.39

TABLE 5. Summary of Motivation for Sobriety and Benefit of StepUP Program

Variable	Current Students (<i>n</i> = 46)		Alumni (<i>n</i> = 37)	
	<i>n</i>	%	<i>n</i>	%
Primary reasons for getting sober				
Improved Quality of Life	29	63.0	30	81.8
Interpersonal Reasons	8	17.4	15	41.5
To Avoid Further Negative Outcomes	12	26.1	7	18.9
Personal Quest	9	19.6	6	16.2
Other	2	4.3	2	5.6
Ways StepUP assists in sobriety				
Interpersonal Support	37	78.7	25	67.6
Safe/Healthy Environment	27	58.7	18	48.6
Educating/Counseling	11	23.9	15	40.5
Accountability	18	39.1	7	18.9
Other	2	4.3	0	0
Did not help	0	0	2	5.6

The primary reason for attaining sobriety among this sample was to improve quality of life, which categorized responses such as “my happiness depended on sobriety,” “to attain a better future,” or “I was too depressed when I was using.” Likewise, interpersonal support (e.g., support from peers, positive staff communication and relationships, advice and direction from staff and alumni) was the most prominent way that the StepUP program assisted in sobriety.

TABLE 6. Demographics of Prospective Sample ($n = 20$)

Variable	<i>n</i>	%
Gender		
Male	13	65.0
Female	7	35.0
Race		
Caucasian	19	95.0
Current Level of College		
Freshman	8	40.0
Sophomore	7	35.0
Junior	2	10.0
Senior	3	15.0
Employment Status		
Full-time student	8	40.0
Part-time student	1	5.0
Full-time student & full-time work	0	0
Full-time student & part-time work	11	45.0
Part-time student, part-time work	0	0

PROSPECTIVE SAMPLE

Table 6 provides a summary of the demographic variables for the prospective sample ($n = 20$); these students completed both a fall and spring questionnaire. Responses to items inquiring about health and well-being are summarized and compared in Table 7. Sources of stress increased from the first assessment to the second assessment, though this increase was not statistically significant. Physical health slightly declined at the second assessment, and symptoms of recent (prior 6 months) mental and behavioral health problems showed a slight decrease from the fall to the spring assessment on four of the five mental health screens: (1) depression-related problems (mean symptom counts of 2.4 and 1.7, respectively), (2) anxiety problems (1.4 and 1.1, respectively), (3) posttraumatic stress problems (1.5 and 1.1, respectively), and (4) attention-deficit problems (3.5 and 2.9, respectively). Furthermore, a paired-samples *t* test was conducted to measure differences over time among rates of risk within the aforementioned mental health screens, which indicated that the individual mental health variables did not significantly change over time. The count of total mental health symptoms (an aggregate symptom count of aforementioned mental health screens) significantly decreased (paired sample $t = 2.49$, $p < 0.05$); however, when corrected for multiple-comparison error using

TABLE 7. Analysis of Change for Mental and Behavioral Health Outcomes in Prospective Sample

Variable	1 st Assessment		2 nd Assessment		Paired-Sample t-test*
	Mean	sd	Mean	sd	
<i>In the past 6 months.</i>					
# of Sources of Stress (range 0–9)	3.9	2.5	4.6	2.6	.88
# of Physical health problems (range 0–7)	1.1	1.0	0.5	1.0	1.60
# of Gambling symptoms (range 0–3)	1.0	0.9	1.0	1.1	.00
# of Depression-related symptoms (range 0–5)	2.4	2.0	1.7	1.7	1.76
# of Suicidal symptoms (range 0–3)	0.2	0.4	0.2	0.5	.00
# of Anxiety symptoms (range 0–3)	1.4	1.2	1.1	1.2	1.45
# of Post-traumatic Stress symptoms (range 0–4)	1.5	1.1	1.1	1.1	1.51
# of Attention-deficit symptoms (range 0–6)	3.5	1.2	2.9	1.6	1.55
# of HIV-risk symptoms (range 0–3)	0.8	0.8	0.8	0.9	.24
Total symptom count (range 0–34)	9.9	4.3	7.9	4.2	2.49
Grade Point Average	2.86	0.9	3.05	0.6	.71

*All paired-tests were corrected for multiple-comparison error using Bonferroni correction, and all variables were non-significant at the $p < .05$ level.

Bonferroni correction ($p = 0.05/\#$ of tests [11] = 0.005), this difference was no longer significant.

We also analyzed change with respect to the substance use and recovery variables. There were no significant changes across time for all these variables.

DISCUSSION

The overwhelming majority of current StepUP students is not using drugs, is maintaining a favorable GPA, is functioning quite well socially, and perceives the StepUP program as vital to their overall well-being. A considerable number of students screened positive for a variety of mental health problems, but this number is not surprising, considering other reports of college-age mental health problems (see Benton et al., 2003; Kadison & DiGeronimo, 2004) and the frequency at which mental health disorders co-occur with substance use disorders (i.e., Clark et al., 1999; Costello et al., 1999). Students' responses infer that they are vested in a successful

recovery, as shown by their involvement in self-help groups, their reasons for getting sober, and their avoidance of situations that may increase the risk of relapse (i.e., living where people use drugs/alcohol, socializing with people who use drugs/alcohol). Current StepUP students also endorsed a sizeable number of assets and social support, which is an encouraging factor in maintaining sobriety.

Most StepUP alumni are also successful with recovery, function well in the academic and work worlds, are not suffering from significant physical health problems, and perceive the StepUP program as vital to overall well-being. Again, screens for mental health problems were endorsed at a considerable rate, though reports of personal assets and social support were pronounced. Overall, the results suggest that StepUP is a beneficial experience for past and present enrolled students, facilitating the maintenance of sobriety while simultaneously promoting academic success.

IMPLICATIONS

The study findings suggest that many students enroll in this program early in their college experience (nearly half of the current students were freshmen and half of the alumni were still enrolled in some type of college program). Thus, the StepUP program may serve for some students as an effective transitional program, in which young adults in recovery use the program as a stepping stone to help them adjust to academic life while maintaining sobriety in a high-risk college environment. The value of this program is also indicated by the open-ended responses referring to the ways StepUP assists in sobriety (e.g., support received from peers and staff, the structured community and safe environment, the tools and resources gained, and the accountability established by the program). The prospective data suggest that many students gained additional over the course of the school year. Whereas we did not find statistically significant changes from fall to spring, many variables did show a trend toward improvement, especially pertaining to mental health symptoms.

LIMITATIONS

Since little scientific research has been conducted on the efficacy and outcome of recovery schools, we feel this study was an important initiation of a research-oriented examination of these programs. However, limitations

existed in this study, such as the small sample size and the restricted sampling area (students were recruited from only one recovery college). These factors result in inadequate generalizability, in addition to the inability to conduct more sophisticated statistical analyses. Future research on college recovery programs should include a control sample to better determine the efficacy of these programs, including a sample of students in recovery who have enrolled in the traditional college setting, as well as a matched sample of nonrecovery students from the same college (i.e., Augsburg). Gender-specific statistical analyses are also an important area for future study (our sample was too small to conduct a gender analysis). Results from these types of samples may provide a better measurement of progress and program value, including the ascertainment of a needs assessment to identify program strengths and areas in need of enhancement.

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