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Recovery High Schools: Students and Responsive Academic and Therapeutic Services

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Abstract

This article reviews findings from the authors' studies of recovery high schools (RHS), including a 1995 program evaluation of a school in New Mexico (Moberg and Thaler, 1995), a 2006-09 descriptive study of 17 recovery high schools (Moberg and Finch, 2008), and presents early findings from a current study of the effectiveness of recovery high schools. Descriptive and qualitative findings are presented. The focus is on characteristics of RHS students and, in light of those student characteristics, findings regarding academic and recovery support programming in recovery high schools.

Alternative high schools specifically established to support students in recovery from substance use disorders have been in existence for 34 years. The earliest known program was established in Montgomery County, Maryland, in 1979. Since then, several recovery high schools (RHS) have been established. As our tracking of these programs has shown, RHS programs have been very dynamic, with new schools frequently proposed and developed while others are reconfigured or closed. According to the Association of Recovery Schools (2013), there are at least 25 recovery high schools currently in operation, with three more set to open in the next year. Since 1979, however, there have been at least 41 more recovery high schools that have closed.

RHS programs are designed to meet both academic and therapeutic needs of adolescents who have received treatment for substance use disorders. Treatment outcomes for young people, while positive, tend to be of short duration and are vulnerable to peer and environmental influences which often lead to relapse upon completion of a treatment episode (Latimer, Newcomb, Winters & Stinchfield, 2000; Chung & Maisto, 2006; Kelly, Dow, Yeterian & Kahler, 2010; Ramo and Brown, 2008). For young people whose treatment is limited to traditional outpatient services, there may be no respite from negative peer

influences and drug environments in one's high school community, presumably exacerbating the problem of relapse and the need for recovery support.

Of the 1.6 million youths, aged 12-17, who needed treatment in 2012, 157,000 received treatment at a specialty facility (about 10.0 percent of the youths who needed treatment) (Substance Abuse and Mental Health Services Administration, 2013). On a typical day, 81,863 adolescents aged 17 or younger were enrolled in substance abuse treatment programs (SAMHSA, 2013). These data further show that 87% of all reported U.S. adolescent substance abuse treatment episodes are in traditional outpatient programs and 13% in residential or inpatient programs; 47% of the episodes were in a mixed substance abuse and mental health facility (SAMHSA, 2013). While these numbers are large, estimates from the NSDUH suggest that about 1.4 million who needed treatment for a substance use problem did not receive it at a specialty facility, leaving a substantial treatment gap.

Thus while there is a large need for post-treatment recovery support for the approximately 140,000 young people in treatment annually, there is also a large number of young people (1.4 million) in need of primary treatment who are not receiving it (SAMHSA, 2013). Both of these groups have become the target population for recovery schools, although the initial focus has been and remains post-treatment recovery support in an academic setting. A central dilemma for the existing RHSs is that in spite of the large number of adolescents obtaining treatment, there are few communities in which recovery high schools operate. Furthermore, in the places that do have a recovery high school option, relatively few students are enrolling in the existing recovery schools. This is a major barrier to the viability of the schools.

Previous Studies

The present authors' have conducted a series of studies of recovery schools, including a 1995 program evaluation of a school in Albuquerque, New Mexico (Moberg and Thaler, 1995; Diehl, 2002); a 2003 dissertation ethnography of one RHS (Finch, 2003); and a 2006-09 descriptive study of 17 recovery high schools (Moberg & Finch, 2007; Finch, Moberg & Krupp, 2014). Dr. Finch has also published a manual for individuals planning to start a RHS (Finch, 2005). We are currently conducting a rigorous research study that examines academic and therapeutic services and outcomes of RHS programs, comparing students entering RHS programs after treatment to students who enrolled in other educational settings (Tanner-Smith & Lipsey, 2014). The present article draws from these prior studies, focusing on how academic and therapeutic programs are structured to meet the needs of the students in RHSs. First, we focus on the research design from three of these studies: the Albuquerque study from 1995, the descriptive study of 17 schools from 2006-2009, and the current rigorous outcome study.

Methods

The evaluation of the Albuquerque RHS (A-RHS) had focal evaluation questions regarding the feasibility of the alternative school, its effectiveness in integrating treatment/relapse prevention with educational services, preliminary evidence of potential effectiveness, and

the institutionalization of the program into the Albuquerque school system and community. The program and its evaluation were funded by the Robert Wood Johnson Foundation. Student level data (n=182 with 208 admissions) were collected by program staff at intake, discharge and follow-up for all cumulative admissions to Albuquerque RHS over a 28-month period (ending May of 1994). Data on implementation and feasibility were collected through site visits, interviews and focus groups with staff, students, parents, administrators, and community representatives. The design was that of a descriptive case study using multiple qualitative and enumerative data sources. There was no attempt to conduct a rigorous outcome study, which would have been premature at the early stage of program development. (All information regarding A-RHS in this paper is adapted from Moberg and Thaler, 1995.)

The next study ("Recovery High Schools as Continuing Care for Substance Abuse," funded by NIDA under R21 grant DA-019045) was conducted as an exploratory, descriptive analysis with the goal of yielding a typology of the schools and their operative program theories/models. Data collection occurred over three school semesters, and included 17 RHSs (plus one pilot school) in six states, representing about one-half of the known RHSs at the time of the study (US-RHS). Anonymous one-time survey data provided information on the staff (n=75) and on the students (n=317) attending these schools. This study was designed to assess the feasibility of conducting a rigorous experimental or quasi-experimental outcome study, gathering data on the nature of programs in operation and learning more about the students in these programs. The complete project included startup, protocol and survey development, and contracting with recovery schools to assure their participation; a one-day site visit to each of the participating schools during which survey and interview data were collected; and data analysis, interpretation and presentation of reports and publications (Moberg & Finch, 2008; Finch, Moberg & Krupp, 2014).

The current study ("Effectiveness of Recovery High Schools as Continuing Care", funded by NIDA under R01 grant DA-029785) is a rigorous quasi-experimental outcome study in which we are following students and parents in three states for one year after a baseline interview (MNRHS). The specific aims of this research are to assess whether students who are receiving or have completed treatment for substance use disorders have significantly better behavioral (less alcohol and other drug use, fewer mental health symptoms, less delinquent behavior) and educational (higher GPA, higher standardized test scores, better attendance, lower drop-out rates) outcomes if they attend recovery high schools for at least part of the school year compared to similar recovering students who attend traditional high schools. The study began in Minnesota due to the high concentration of RHS in the state (hence MN-RHS), and is being expanded to other states. Students are being recruited from both substance abuse treatment facilities and RHSs and subsequently followed for 12 months (Botzet, McIlvaine, Winters, Fahnhorst & Dittel, 2014). A comparison group of students not attending an RHS will be selected from the students recruited in treatment settings, using propensity score techniques (see Tanner-Smith & Lipsey, this volume).

Descriptive data are being collected during two to three hour site visits interviewing staff on the nature of the RHS programs. For purposes of this chapter, data regarding academic and therapeutic programming from site visits by our research team to seven recovery high

schools in Minnesota are examined, along with preliminary data from baseline MN-RHS student interviews (n=64) in order to highlight the characteristics of students being served by the schools.

Findings

Recovery High School Students

Table 1 provides data regarding student characteristics in the three studies of recovery schools, with data from a total of 563 students. The 182 students at the Albuquerque RHS (ARHS) accounted for 208 consecutive admissions to the program (1993-1995). The 317 students from 17 U.S. RHS programs (US-RHS) represent students who were present on the single day of our site visits to each school (2006-2009). Our current study has enrolled 64 students attending RHS programs in Minnesota (MN-RHS); these are preliminary data since recruitment has continued and is expanding to other sites and other states. In the MN-RHS sample, students are included who either entered the study while enrolled in an RHS or who were recruited in a treatment program and reported attending an RHS at the three month follow-up point.

Across samples, the mean age of students ranged from 16.0 to 16.7; the age range reflects typical high school enrollment, ages 14-18. Males are only slightly over-represented (54-55% male). The students tend to be representative of the racial/ethnic distribution of students in the communities where the schools are located. In Albuquerque there were 45% Hispanic ethnicity students and 33% non-Hispanic white students (along with 11% Native American, 9% Multi-racial, and 2% African American). In the US-RHS sample, 78% were non-Hispanic white, and in the current MN-RHS study there have been 86% non-Hispanic white students to date, reflecting the population of Minnesota, from which the sample of 64 students in the preliminary analysis was drawn.

Reflecting the different geographic populations, the US-RHS and MN-RHS studies had a higher proportion of non-Hispanic white students than did the Albuquerque program, and a considerably higher level of parent educational attainment. The educational attainment of RHS students' parents in both of our recent studies is higher than typical in the US adult population, where 29.9% of adults over age 25 had a college degree in 2010 (United States Census Bureau, 2012).

Students had a high frequency of serious risk factors in their lives, and one-half or more had an assessed mental health diagnosis as well as a substance abuse problem. This is reflected in their treatment histories; over two-thirds reported having past substance abuse treatment in each sample, and the majority reported residential treatment as well as outpatient services for substance abuse. In the MN-RHS sample, 61% met DSM IV diagnostic criteria for alcohol dependence, and 94% met DSM-IV diagnostic criteria for "other" drug dependence—mostly for cannabis. DSM criteria were operationalized using the MINI SCID 5.0.0 (Sheehan et al., 1999).

Over half of the students had also participated in mental health services for problems other than substance abuse, with over a third overall receiving residential mental health care. Fifty

percent or more in each sample had evidence of major depression, either based on a formal psychiatric diagnosis (A-RHS), the GAIN (Dennis, 2010) depression symptom checklist (USRHS), or DSM-IV criteria (MN-RHS) as operationalized in the MINI SCID 5.0.0 (Sheehan et al, 1999). In particular, perhaps as a result of our sampling procedures or due to policy changes affecting selection into RHS programs, the MN-RHS sample reflects higher rates of mental health disorders than the prior samples, with 88% reporting mental health specific prior treatment and 80% meeting the criteria for major depression. RHS samples score significantly above mean scores of treatment populations on severity of substance use problems and internalizing behaviors on standardized scales—the PEI in A-RHS and the GAIN-Q in US-RHS (Winters & Henly 1989; Dennis, Titus, White & Unsicker, 2005).

In A-RHS over one-half were actively involved in the juvenile justice system at the time of intake, 40% admitted to gang involvement, and over two-thirds had a juvenile arrest history. These numbers were smaller in the other two samples, with 25% of the US-RHS sample reporting “current” juvenile justice system involvement and 19% of the MN-RHS reporting juvenile justice system involvement in the past three months. About half of the MN-RHS sample reported lifetime criminal justice system involvement.

Student drug use was primarily marijuana and alcohol. Sixty percent or more in each sample reported at least weekly use of marijuana, while 30% to 58% reported daily use of cannabis. Alcohol was used at least weekly by half or more in each sample, with daily use ranging from 5% to 27%. Past use (not tabled) of marijuana and alcohol was ubiquitous—95% had used marijuana, and 88% alcohol, at least five times—in the MN-RHS sample. A history of ever-use of other drugs was common, including in the MN-RHS sample opioids or narcotics (78%), amphetamines (73%), hallucinogens (72%), cocaine (66%), and club drugs (66%). In the US-RHS and MN-RHS samples, it was possible to estimate the percent of days in the past one (or three) months that students had used alcohol and/or illicit drugs. These data indicate that these young people used on over two-thirds of the days that they were in the community, prior to their most recent treatment episode. Some history of injection drug use was admitted to by 19% of the students in A-RHS, and 17% in MN-RHS (not available for US-RHS). Finally, tobacco use was ubiquitous, with about two-thirds in each sample reporting daily tobacco use.

Academically, about half of the A-RHS students were not attending school at the time of admission to the school; test scores (TABE, available only in the A-RHS sample) indicated serious deficits in achievement relative to age/grade. In the US-RHS sample, about one-quarter were not attending school, and in the MN-RHS group most were enrolled but about a third were missing at least half the days of school in the past three months. In the MN-RHS sample, the average prior school year GPA reported at baseline was 2.47 (s.d. = .86).

Thus we see a similar distribution of age and gender across studies, with the race/ethnicity reflecting the local populations. Parental educational attainment is higher than that in the general population, suggesting a higher SES level. Alcohol and drug dependence are the primary diagnoses, with marijuana and alcohol often combined with extensive use of other illicit drugs. Consistently across samples, there is a high rate of co-occurring mental health disorders and treatment histories reflecting these dual disorders.

Therapeutic and Academic Programming

Given the student characteristics, combined with the structural and contextual aspects of RHS programs, a number of challenges must be overcome. The students presenting at RHS programs clearly have a complex set of recovery support, educational, mental health, criminal justice and psycho-social needs. We now turn to our data to describe how RHS programs have addressed these challenges in their combined roles as schools and as therapeutic settings supporting recovery

Albuquerque RHS (A-RHS)—During the 28 months of operation which were observed, the A-RHS program evolved in response to the characteristics of the students it was recruiting and, ultimately, the needs and demands of the community, the school district and the public treatment system. Due in large part to the unanticipated severity of the problems of the students, the program was never able to accommodate the numbers of students (n=200) originally anticipated. Enrollment averaged 34 students per month. Over time, the original model of a transitional alternative school program for high school students recovering from substance abuse, who would return to regular schools, changed. While the name of the school and its formal mission were retained, the school functionally became that of a day treatment program in a school setting for students with severe social-emotional problems, many of whom were dually-diagnosed. The goal of returning students to a regular school was increasingly questioned as the program evolved. There were also several major changes over time in the structure of the academic program.

The core technology for the internal operation of the program—the use of a therapeutic community or milieu, in a day treatment/school setting, was effectively implemented and maintained throughout the life of the evaluation. An excellent and committed staff was recruited and developed a significant level of cohesiveness during the initial phases of the program. It was apparent to the evaluation team over the course of the evaluation that the milieu/therapeutic community concept did work, even with the severely troubled youth participating in the program. Feedback from parents and students regarding the therapeutic benefits of the program was uniformly positive. On a qualitative level, the program appeared to have positive effects for a substantial portion of the students and families enrolled, particularly those who remained in the program for a relatively longer period of time. The median length of stay was 93 calendar days.

The program as implemented had much smaller enrollments than initially envisioned, with end of month enrollment averaging 34 students. The complexity of the student problems hindered the program's ability to work with larger numbers of students; the milieu could not handle more than 40 to 50 students with severe problems at one time. This was compounded by fewer referrals to the program than had been anticipated. The per pupil cost of the program, given the limited enrollment and severity of student problems, was high relative to other APS alternative schools.

The emphasis on therapeutics which resulted from the high degree of severity and complexity of problems, as well as uneven admission patterns and academically heterogeneous students, significantly detracted from academic aspects of the program. Experience over the three years suggested that most RHS students would not be able to

successfully return to regular high schools. Data at closure, as well as from informal follow-up an average of eight months after discharge, indicate limited success educationally (14% completed RHS or graduated; 35% were attending school at discharge, 48% dropped out of school by follow-up). No comparative data were available from similar populations or programs from which to judge the likely success the RHS students might have had without the program.

Moberg and Thaler (1995) concluded that the Albuquerque RHS model—as modified over the life of the project—was feasible programmatically, with impressive evidence of therapeutic effectiveness but limited educational success. The programmatic feasibility was limited by the high per pupil costs encountered due to the severity of the presenting problems among the students who were attracted to the program. The nature of the students also lead to an emphasis on therapy over traditional educational experiences. Thus the model which has proven feasible is that of a day treatment program for substance abusing and dually diagnosed students, provided in an alternative educational setting.

At the end of the A-RHS evaluation, Moberg and Thaler (1995) concluded that it remained questionable whether the concept could be institutionalized and taken to scale within an educational setting. Cost effectiveness in terms of cost per student was a major impediment (see also Diehl, 2002), particularly since the milieu approach did not seem to be able to handle more than 40-50 students at a time.

National Study of 17 Recovery High Schools (US-RHS)—Our 2006-2009 study of 17 schools focused on characteristics of the school's educational and therapeutic programs, in light of the background of the students served (Moberg, Finch & Krupp, 2010). All schools offered both academic programs and varying degrees of therapeutic support that were designed to assist students in their recovery. School structures included independent schools and programs embedded within another school building and/or program. The schools that were embedded made serious efforts to maintain physical separation of recovery school students from other students by using scheduling and physical barriers. Affiliation with public school systems is the case for most recovery schools, and seems to be a major factor in assuring fiscal and organizational feasibility.

As with the Albuquerque RHS, students came with a broad and complex range of mental health issues, traumatic experiences, drug use patterns, criminal justice involvement, and educational backgrounds. Due to additional per pupil costs associated with serving non-academic issues, the complexity of these problems limits the enrollment capacity of the schools. The mean enrollment was 19 students at the time our site visits, with a range of two to 46; attendance was less.

Student survey data revealed a more positive assessment of the therapeutic value than of the academic rigor of the schools (Moberg and Finch, 2008). While these recovery high schools appear to successfully function as continuing care programs that reinforce and sustain the therapeutic benefits students gained from their treatment experiences, the treatment gap has created a scarcity of students who have moved into recovery through treatment. Despite a large number of students in the U.S. with substance use disorders, a key finding was that

most of the RHS schools are accepting students who have not received prior treatment—over 20% of students admitted had not received prior alcohol & drug treatment. Some schools have begun creating adjunct programs to provide outpatient treatment before students move into the recovery schools, while others are providing more counseling, structure, or behavioral contracts to meet the needs of these students. The emphasis of most recovery high schools remains continuing care and not primary treatment, but just as the small enrollments allow for individualized academic programs, therapeutic elements are also being individualized.

Current Recovery School Effectiveness Study (MN-RHS)

Site visits and intensive qualitative interviews were conducted at seven recovery schools in Minnesota (MN-RHS) during 2011-2013. All interviews with school staff and local stakeholders were recorded and transcribed. In this section we summarize emergent themes from these interviews/site visits, first regarding academic programming and then therapeutic issues.

Academic Programming—Two significant academic challenges emerged from the data. The first challenge expressed by school staff was the need to account for variation in the subject being taught depending on students' grade levels and preparation. Grade level is significant both in terms of chronological age of the students and in the students' achievement to date, since a student with a significant substance abuse history may be chronologically a senior but may have missed significant pre-requisite curriculum due to having missed substantial periods of school. This is exacerbated by the small enrollment in RHS programs and the sparse staffing patterns. For example, one teacher may try to teach 9th, 10th, 11th, and 12th grade English with the same curriculum for all students in one class period. An Intervention Specialist at School Site Six stated:

Well, certainly it will always depend on the talents and gifts that the teacher brings to the table. But, for example, if one taught math, they don't just do math. I mean that teacher is differentiating instruction throughout the process because, yeah, I mean you have to when you have, when you're talking about Algebra or Geometry and Algebra 2 for example. But even within the role of Algebra, he's differentiating to make sure because he's got some kids that, you know, just math has never even happened, just it's a very, very difficult process for them. So acquiring specifics about skills is a piece of the puzzle, too, which is when we have the special ed. teacher, if she's involved, will become part of that classroom, too. So we continue to try to layer services wherever we can. We also have for the other content areas; there will be times when just because kids need certain classes, that they will be given different instruction to meet those particular needs of that particular course.

A related challenge academically is that there are no or few academic resources to go beyond minimal education requirements set by the Minnesota Department of Education. Given the small student body and teaching staff, RHSs generally cannot offer Advanced Placement (AP) classes or special electives. At best, RHSs which are embedded within larger school settings may make use of resources of the broader program for specialized or elective curricula and a broader choice of classes. However, this is rare due to a competing

desire to isolate RHS students from the broader student population in order to facilitate recovery. A Licensed Drug and Alcohol Counselor at School Site Seven explained,

All of the courses in ["Southern MN"] school districts are aligned and so each course, you know, is based upon the standards, and then upon the standards we build essential learner outcomes. And we hit those essential learner outcomes hard. In a normal school, you know, they can do that plus more, we, we can't do the plus more, and so we just make sure that they are getting those standards.

We found a large variation in education models in RHS programs. All cited holding facilitated classes with teachers present; in some cases this was supplemented with online coursework and in others with individual packet learning. Many sites mentioned that with the RHS model, students were given a great deal more independence and flexibility than they would receive within a traditional high school model. The ability of students to engage in independent learning was mentioned as particularly necessary when online or packet coursework was used as an educational method to meet students' academic requirements.

Several RHS programs were embedded physically and organizationally in Area Learning Centers (ALCs), alternative settings unique to Minnesota that are schools of choice that provide educational programs to a wide range of students with special needs in a non-traditional high school. In ALC settings, teachers may be shared between various programs including the RHS, so their presence is more limited than would be a full-time teacher assigned solely to the RHS. There were also situations where teachers rotated between two RHS sites, again reducing their ability to be totally assimilated in a given school. While modifications to separate the recovery school program students from the regular ALC students, such as separate schedules and distinct spaces within the building are common, some courses were also provided within the building with the regular ALC population, or in a mainstream high school off-campus. The latter options were considered somewhat risky for the RHS students due to the potential for negative peer influences and availability of drugs at a particularly vulnerable time in student's recovery process.

Other variations in the educational model which have been implemented to match student needs and organizational limitations are to include work experience to gain credits and/or to incorporate community service work into the curriculum. To dually meet academic and therapeutic needs, recreational activities and involvement with sober/recovery community activities are regularly used to supplement formal coursework.

While some early RHS models considered the programs as transitional and anticipated return to regular high schools for most students, the majority of schools in the MN-RHS study focus on graduating students from their specific settings without a transfer back to a comprehensive high school program. The Principal at School Site Four stated:

Last year we had four kids do that [leave and go back to traditional high school]. Three are using again, and one is doing fine. Usually in my small experience, "I want to go back," means, "I'm going to use, you know I'm going to use, I'm not going to flat out and say it, don't tell my parents but because it's, you know, you can't give me what I need here." Okay, what do you need? "Calculus." We teach Calculus here, what's your problem? You know, yeah, it's just usually code, you

know, and so talk to them once and they drop back in. Yes, you went back to the big high school and she said, “You’re right. I drank every weekend.” You know, she said, “But you taught me to hold it together during the week.” It’s like no, that’s not what I wanted to hear. But she graduated, and I said, “So are you still drinking now?” No answer means yes she is. It’s like, “So are you going to take care of this someday?” She said, “Yeah, but not now.” It’s like okay. I mean what else can I say? You know, there’s nothing.

By establishing a more flexible and varied longer school year, with flexible attendance dates, RHS programs can graduate students at different points during the year. This flexibility is particularly important in that students in need of recovery support do not “time” their intervention needs to the traditional nine-month school calendar. All sites were in agreement that they found the ability to have some flexibility with the academic and therapeutic design, in addition to day-to-day programming requirements, as highly beneficial to the students. This flexibility allowed them to meet the emergent recovery needs of their students as they occurred, allowing students to do things such as take extra time to engage in therapeutic supports and complete coursework for the day or period independently if needed.

Therapeutic Programming—The major challenges in the area of therapeutic support for student recovery revolve around resources. While school districts are to some extent willing to fund academic programming, the therapeutic component is seen by school districts as an additional burden in RHSs, as this component is not their responsibility. The essential therapeutic support needs in an RHS, coupled with small class sizes and enrollment, presents a fiscal dilemma for RHS programs. Each site sought to guarantee that there were consistently enough therapeutic supports in place for students, despite heavy cuts to staff/resources in this area.

Therapeutic programming in most schools included a daily group time with check-in for each student. In most sites, recovery activities were placed within a consistent period during the day, with accommodation for an all school extracurricular activity or individual needs of students. Recovery support groups were often structured as “life skills” groups, but included peer support activities and building of community. Most sites made flexible use of the 12-step model for youth’s recovery program/plan; 12-step group participation outside the daily school experience was encouraged, as were community sobriety events. All sites mentioned administrative flexibility with the students’ chosen path to sobriety, whether it be 12-step or a more individualized program, with staff being supportive as long as students had a recovery plan that they were working on. The Principal at School Site Four explained,

Are you committed to sobriety? “Yes.” Let’s do it, you know, yeah, because there’s more than one way to get clean. And for some kids it’s treatment, and for others - I wouldn’t say a lot, but for others - they do it by themselves or within a different support system. And why would I negate that? If they’re sober, they want a sober community, and they want to finish their high school academics, take them in.

Several sites had selected students speak about their own AODA experience at mainstream high schools as both a reinforcement for the RHS students and as a preventive intervention

in the mainstream school. Students were also encouraged to be actively involved in each other's recovery in the classroom and outside of school hours. This level of peer support was mentioned by several sites and considered to be essential in students remaining sober long term (for further elaboration, see Karakos article, this volume). Individuals in several sites commented on strong staff/student relationships that facilitated the therapeutic environment.

In many RHS programs, one-on-one counseling was available whenever requested during the school day. Such counseling was often provided by an individual trained as a therapist or counselor, who may also have another role (teacher, administrator, parent or community coordinator) in the school. This immediate flexible response to student social-emotional needs and crises is a common characteristic in RHS settings. A Teacher at School Site Five stated:

I would say like education is a little bit more back-seat to, you know, to their well-being. I wouldn't say their sobriety, but their, so you know, we do allow things. I taught, you know, 14 years in classrooms where I wouldn't let certain behaviors, not even behaviors, but just, you know, freedoms or different things to, if you wanna go work in that room and work on the computer, listen to your music and get that done, you know, we have a lot more freedom here to do that be-, and if it's, if they're having a bad day, kind of allow for that.

School staff frequently collaborate as part of a care team for individual students who are involved in integrated multi-system team approaches to treatment planning and recovery support. All RHS programs actively work with parents, social workers, probation officers, and other support services in place for a student. All sites highlighted parental involvement as beneficial to the student's recovery. Many sites mentioned regular groups for parents at the RHS, ranging from weekly to monthly meetings, to provide the additional component of parental involvement as well as support for parents in working through their child's recovery.

Many RHSs have to take any student that requests admission because they are publicly funded alternative school programs. In some cases, even if students are actively using substances, district policies mandate open admissions. This leads to a reduced ability to build a strong therapeutic environment due to selective admission. Many RHS programs require a minimum length of sobriety and prior treatment as part of the intake process, although in some circumstances this requirement has to be relaxed due to district policies and to the need to keep maintain enrollment numbers. However, all sites required students to sign an agreement to follow school policies. For all sites, this included a clause that all students attending must remain sober. This gave each site the ability to dismiss a student who did not abide by this contract. While this issue was addressed in several sites, it did not seem to be a very large concern; strategies to voluntarily weed out potentially disruptive or using students were mentioned in several interviews. The Director at School Site Three stated:

...as a public charter, as a publically-funded school, we were open to every single student who wanted to be here. I cannot discriminate based on anything, right. So there really is no admissions; as long as I have space, I have to take them. Okay,

now that said, once a student agrees that they're going to be coming here, they have to follow the same board-approved rules as everybody else. So if I had a student who came from across the street who was still actively using, I could not theoretically keep them out of this school. I shouldn't say theoretically. I cannot keep them out of the school. I would have to enroll them, and I would not hesitate, you know; this is what I have to do. And but once they sign their name on that dotted line, they have to follow the exact same board-approved rules as every other student. If they choose not to, then they can; then we'd have to find another site for them. And I can find another site within our district to serve their educational needs; it doesn't have to be here.

Support for abstinence and relapse prevention is a central function of an RHS. In the daily group check-ins, as well as via the peer community more broadly, students are encouraged to self-disclose any lapses in sobriety. Random urinalysis for drug use is used in all settings to enhance student accountability. All sites will work with a student who has relapsed, following a similar protocol. Most sites conducted random urinalysis, and mentioned that urinalysis could also be requested by school staff or any person involved in the student's care team (parent, social worker) that believed there was a possibility of relapse. Three of the sites mentioned that there was a limited number of times a student could relapse before being asked to leave the school, ranging from two to four.

A major principle is that the student should take responsibility and admit the relapse to everyone including the community of peer and staff in the school and to parents. Some sites used restorative justice techniques around conflicts and relapses. Restorative justice, through methods such as restorative groups or “circles,” offers students and staff a chance to say what happened, how they were impacted, what they need, and what they are willing to do to help make things better (Wilcox, 2007).

A typical procedure for dealing with relapse is:

- Student admits the relapse to the peer community and all members of the support team face to face;
- Conference with student, parent and rest of support team (social worker, PO, etc.) set up;
- Create a recovery plan;
- Increased one-on-one time with counselor and/or additional relapse support group during school;
- Add services as warranted.

Thus isolated cases of relapse are treated as critical events in the recovery process which warrant significant attention from the school community, additional support services and monitoring, and an opportunity for students to take ownership of their recovery.

Academic and Therapeutic Balance—A recurring issue in this program of research has been that of the balance between academic and therapeutic aspects of RHS programs. The Principal at School Site Four explained,

I picked up right away that there's a split in sober schools. One is sober schools that come from a treatment perspective, and one, and the other one is schools that come from an academic perspective. Is the sober school/recovery school coming from basically treatment is more important, we have to maintain the treatment flow, and oh, by the way, let's get you your high school diploma on the side? Or are we having an academic high school with treatment support? And because of my background in straight education and things like that, without realizing it, the school that we were designing was academic with sober support.

Our analysis of the data collected to date indicates that four of the seven sites weighed more heavily towards academics, reiterating that they were “schools first.” One RHS clearly weighed towards recovery support and therapeutics as the primary emphasis. The remaining two spoke of an equal balance between academics and recovery support. The Executive Director at School Site 2 stated:

And then we've had to kind of morph into this model of really fitting in and adhering to high academic standards from MDE (Minnesota Department of Education) and authorizing that recently occurred. So I think what used to be a little more warm and fuzzy and feeling-based has had to morph into a balanced setting. So I think back in the day, recovery was primary and so if the scales were weighted very heavy. And I think now, I think, you know, they're both weighted maybe not equally. I still think recovery is pretty strong. So I think there's just been an evolution that had to happen naturally.

The limited resources of RHSs seem to take the biggest toll on academic supports. It appears that sites have been able to maintain a strong level of therapeutic support even with less total staff, an indication of the central commitment of RHSs to providing recovery support. Student survey data reinforce this. In both US-RHS and MN-RHS, there was much higher agreement among students that their school “provides a good clinical/therapeutic program” (55% agree, 34% strongly agree in MN-RHS) than with “this school provides a high quality academic program” (53% agree, 3% strongly agree, MN-RHS). A Licensed Drug and Alcohol Counselor at School Site 1 stated:

So there's been a huge push that we never lose recovery, that's the key to our existence, but I think there's been frustration. Sometimes I'll hear someone say, we can't just be a feel-good school. We can't just be here to talk about, you know. And then that balance, that tension is always there, but everyone that works here understands how important it is. And nobody is ever going to say to a kid, it's not important.

All sites praised the abilities of their educators to be responsive to frequent changes in the academic environment and flexible by providing much more comprehensive education across grade levels than a traditional high school teacher would encounter. However, resource cuts and limitations affecting teachers appear to mean more classes with combined grade level instruction, less time with teachers during the day, and teachers covering subjects they did not specialize in for licensure.

Enrollment in Recovery Schools—One site within the study did not face the same level of challenges as the others, and it also had the largest enrollment numbers. Larger enrollment numbers offered more resources to this site, which meant this site was able to offer more extracurricular activities, therapeutic services, and a more standardized high school educational model with some focus on college preparation. This suggests that higher enrollment numbers for RHSs could allow for greater availability of academic and therapeutic services to students.

In the introduction to this paper we presented data indicating that, in spite of the treatment gap between need and receipt of treatment, a large number of adolescents were receiving specialty services for substance use disorders in the U.S. Still, even though modest, stable enrollments appear to allow for greater service provision, and there seem to be plenty of students in need of continuing care services. There is a constant struggle within most recovery schools to fill the available slots.

Interview data reveal several factors that may be driving this discrepancy. First, there is a stigma for parents. According to school staff, some parents are embarrassed to say that their child is attending a recovery high school. In addition, parents often have trouble accepting the idea that treatment, which often comes at a high cost, has not cured their child of the substance abuse problem, and that he or she may need continuing support following treatment. The Principal at School Site 4 stated:

Our science teacher's husband's boss had kids go through Sobriety High like 10 years ago, and it wasn't until the boss learned that...[his] wife worked at "Recovery Academy", a recovery school, that he said, "Oh, the private school my kids went to was Sobriety High." Up to that point the line was well his kids go to private school...Because I don't want people to know in public that my kids are going to a recovery school. Now isn't that sad? I find that just absolutely sad about that. And I think that's part of it too, the parents want to believe that their kid's never going to use again. So, then they go back to the home high school and we know what's going to happen with 90%, 95% of our kids are going to be using again.

Referral sources (probation officers, social workers, treatment providers, schools, parents, and other youth) are similar across sites, with some having stronger relationships with the school districts than others. Nurturing referral sources with regular contacts and information exchanges seems to be a critical function for recovery school administrators, but it can be very time consuming and divert attention from the day-to-day activities of running a school.

Finally, potential RHS students themselves may be resistant to attending a recovery school. Under Minnesota school choice, students in recovery are not mandated to attend recovery schools. After residential or intensive day treatment, young people often request to go back to their home school to see how it works out following treatment. These recovering students indicate that they are familiar with their former school and have peers there who may not be present in the RHS. Since parents often prefer this option, a limited number of high school students access the potential recovery support benefits of recovery schools. As the Director of School Site 3 explained,

I think one of the reasons why some people don't choose to come to sober schools is because of that stigma. I was out at a, well I wasn't allowed to actually speak to their families because that would have been an endorsement of our program, but I was allowed to speak to the counselors of this organization. And that was a question that they asked me and that they said was a big concern of some of their parents that they work with. And this specific organization tends to work with a higher level of income than some of the other treatment centers so that, you know. I don't want my kid to come from a special school or a stigma, you know, and I've had some parents come in with concern.

Recovery school outcomes—A primary purpose of our current research is to study therapeutic and academic outcomes for RHS students. Our past research has shown promising results. In A-RHS, data were collected by the school staff on student outcomes at follow-up three to twenty months (mean = 8 months) later. Follow-up data indicate that about 40% of students remained abstinent from alcohol and other drugs until the follow-up contact; however, nearly half had dropped out of school. Over half of the students reported “good” or “improved” family relationships at follow-up. Thus a substantial number of A-RHS students did significantly benefit from the program in the areas of substance use and family relationships, with limited success academically (Moberg & Thaler, 1995). In the US-RHS study, we found significant self-reported improvements from retrospective pre-tests to present (Howard, 1980; Nimon, Zigarmi & Allen, 2011) among RHS students. Mean days drank alcohol were reduced from 34 (in the 3 months before treatment) to four since they had started at the RHS, and mean days used cannabis reduced from 47 to three; only 20% had been abstinent from alcohol and other drugs the 90 days before entering the school, compared to 56% currently. Based on self-reported use patterns among US-RHS students, we calculated that, on average, 32% of their days were abstinent during the 90 days before entering treatment, compared to 82% of days abstinent since entering the RHS. There were also significant reductions in mental health symptoms on the GAIN using the retrospective baseline approach. On global items regarding their progress, 80% reported doing better with alcohol/drug issues, 71% doing better academically, 59% doing better emotionally, and 57% better with family issues (Moberg and Finch, 2007). In the MN-RHS study, preliminary unadjusted analyses comparing RHS students to control participants suggest similar positive behavioral outcomes, though data collection and analysis is in too early a stage to report here.

Discussion

The data on students attending recovery schools in these three studies conducted over a 20-year timespan point to a student population with an extreme set of issues and problem complexity. RHS students enter the schools at a high level of severity on substance use disorder indicators, and they have a high rate of concomitant mental health disorders as well as numerous socio-emotional challenges to functioning in other areas of their lives. Many of the students who are attracted to RHSs have co-occurring disorders (see also Dennis, White & Ives, 2009). Most have participated in prior treatment, typically for both their substance

abuse and other mental health problems, and this is a population at high risk of relapse (White, 2008; Anderson, Ramo and Brown, 2006).

Student characteristics are severe and complex. The A-RHS study found RHS students scored at the severe range of young people with diagnoses of substance use disorders on standardized diagnostic tools (Winters and Henly, 1989; Moberg and Thaler, 1995). Similarly, in the 17 site US-RHS study, the RHS students scored very high on the GAIN relative to other populations of students in intervention and treatment programs.

RHS students typically have an extensive treatment history. However, as many as 20% of students in RHSs have not had formal specialized treatment for substance use disorders, and some have *no* treatment history. In the context of the treatment gap, RHS programs would seem to offer a potential avenue for getting young people needed services they otherwise would not be able to access. This was one of the goals of the A-RHS, although one imposed by the funder and not the program planners. Indeed, while many RHSs have begun accepting students without prior treatment, there are usually not programs in place or resources available for the current RHSs to provide primary treatment in addition to continuing care. While staff may have started embracing the potential of treatment services in recovery high school settings, the practical limitations must still be resolved.

Beyond the treatment gap is the gap in adequate recovery support services for students who have received primary substance abuse treatment services. There is clearly a need for continuing care and recovery support, particularly for students whose treatment is limited to the typical outpatient program—87% of all treated adolescents receive service from outpatient treatment programs (SAMHSA, 2013). Multi-systemic therapy models that include extensive work with both the family and the adolescent's school have shown improved outcomes in reducing adolescent substance abuse (Waldron & Turner, 2008). These multi-systemic therapy models have also shown to be effective for adolescents at long term follow-up in reducing delinquency, internalized distress and in reducing risk in family, peer, and school domains (Liddle et al., 2008; Liddle et al., 2009; Waldron & Turner, 2008). Clearly, both the treatment gap itself and the gap in adequate recovery support need to be addressed.

The academic and therapeutic balance in these small, dynamic, and resource-poor settings with high-need students is of considerable importance to the education system and the treatment community alike (Finch, Moberg & Krupp, 2014). There is a continuum of programs that address the needs of this student population. This continuum reflects the complexity of student needs as students move from the contemplation stage to the maintenance stage. This movement corresponds to the level of support needed in the progression from early intervention to intensive treatment to longer term recovery support. Recovery high school programs tend to be equipped to deal with issues at a lower complexity level than therapeutic or treatment schools (such as those within a residential treatment setting). Recovery high schools provide recovery support rather than primary treatment or therapy.¹ However, the dimensions of student complexity and therapeutic support needs are on a continuum, and a school's position may shift over time depending on student needs, prior treatment histories, and recruitment anomalies. At times, because of

their commitment to both recovery support and academics, RHS programs struggle to maintain adequate educational programming when therapeutics become of central concern.

Finally, the sustainability and long term viability of recovery schools has been an ongoing concern. As noted earlier, over 40 schools have come and gone over the years, and recovery schools are institutionalized, albeit tenuously, in only a limited number of sites around the U.S. Enrollments in most schools have not stabilized at capacity. Small and relatively expensive per pupil alternative high schools are considered a burden in many school districts; there is no consensus, policy, or political will to provide public multi-sector support for these programs, in spite of their potential for long-term cost savings (Diehl, 2002). Our current effectiveness study, which also includes a cost-benefit analysis, may help to build the evidence base to set policy and inform allocative decisions in the future regarding these promising but tenuous programs.

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¹The Association of Recovery Schools also has provided a thorough typology and discussion of the various levels of recovery support provided in schools (Finch & Hart, 2013), which can help the reader distinguish more clearly between a recovery high school and other treatment programs or alternative schools.

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Table 1

Student Characteristics in three studies of Recovery High Schools

Characteristics of Students at Enrollment:	Albuquerque RHS (A-RHS, n=182)	17 US Recovery High Schools (US-RHS, n=317)	RHS Effectiveness Study (MN-RHS, n=64 to date)
Mean Age (s.d.)	16.0 (1.1)	16.5 (1.0)	16.7 (1.1)
Percent male	54%	54%	55%
Percent non-Hispanic white	33% [+45% Hisp]	78%	86%
Percent parent highest educ => BA	24%	55%	58%
Past Substance Abuse Trt:	66%	78%	100%
Outpatient	50%	55%	81%
Residential	60%	54%	71%
Past Mental Health Trt:	51%	51%	88%
Outpatient	41%	23%	73%
Residential/Inpt	47%	25%	30%
Percent Depression	50% Dx	53% *	80% **
Percent Juv. Justice involved	54%	25%	19%
Percent Marijuana Weekly+/Daily	79% / 58% daily	62% / 35%	77% / 30%
Percent Alcohol Weekly+/Daily	72% / 27% daily	55% / 19%	47% / 5%
Percent of Days Used Alc/Drugs	NA	68%	72%
Tobacco Use Past Month; Daily use	79%; 69% daily	91%; 67% daily	95%; 66% daily

* High score on GAIN depression symptoms scale

** Meets DMS-IV criteria for major depression