

Peers Influencing Peers: Substance Abuse Patterns among Students in Recovery
Schools

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Dedication

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Chapter 1: Introduction

Despite laws regulating the distribution and consumption of alcohol, the personal health risks, and the costs to society, the number one drug-of-choice for teenagers continues to be alcohol. Approximately 72% of all high school seniors have tried alcohol, 48% drank alcohol within the last thirty days, 55% have been drunk, and 29% participated in binge drinking. In addition to alcohol use, 47% of high school seniors report illicit drug use including marijuana, prescription drug use, narcotics, inhalants, over-the-counter drugs, and other drugs (Johnston, O'Malley, Bachman, & Schulenberg, 2008). Teen drug use is associated with: (1) lower grades and achievement, (2) lower school attendance, (3) behaviors leading to suspension or expulsion, (4) low academic expectations and low motivation, anti-social behavior, depression, attention deficit and hyperactivity disorder, schizophrenia, psychotic disorders, impulse control disorder, personality disorders, and mental retardation (Svobodny, 1982; Casemore, 1990; Andrew et al, 1991; Cosden, 2001; Schiff & Cavaola, 1990; Harrison & Hoffman, 1987; Hedin, 1983; Kauffman, 1993; Lerner, 1997; Winters, 1990; Ralph & Barr, 1989; Morrison & Smith, 1987). Poor academic performance is one of the strongest predictors of dropping out of school (Gibson, 1997).

Although many schools have adopted a Zero Tolerance policy toward alcohol and other drugs, schools continue to be a place for teenagers to obtain and use these substances. The 2007 Minnesota Student Survey (Minnesota Department of Education, 2007a) reported that 7.6% of 9th graders and 13.9% of 12th graders used substances before or during school hours. The percentages of students indicating that they had opportunities to obtain drugs on school property included: 16.3% (9th graders) and

18.9% (12th graders). For the student returning from substance abuse treatment, the presence of alcohol and other drugs in the school undermines the effectiveness of the treatment. Schulman (1985) states:

“No ethical clinician would treat an adult alcoholic and upon discharge recommend that the newly recovering person spend six hours a day in a bar. However, that is exactly what we do with the adolescent. For that adolescent, school is the ‘bar.’ That is where the alcohol is. That is where the drugs are. That is where the pressure to use is found” (p. 21).

The presence of alcohol and other drugs in the schools may exacerbate the problem for those untreated adolescents and contribute to relapse for those students in recovery. The relapse rate for students completing treatment ranges from 35% to 80% (Brown, 1989; Catalano, 1991; and Winters, 2000). Unfortunately, “virtually all post-treatment adolescents returning to their old school report being offered drugs on their first day back” (Spear & Skala, 1995, p. 350). Abstinence is difficult when alcohol and other drugs are present in the school and attendance, engagement, and academic performance remain poor (Bowermeister & Finch, 2003; Harrison & Hoffman, 1987). What is less clear is how school principals and other school leaders can assist recovering adolescents to avoid relapse.

Social Learning Theory

Contact with drug-using peers may contribute to the high relapse rate of adolescents. Social learning theory suggests that drug use may be viewed as a socially acquired behavior that is initiated and reinforced by appealing role models (Akers, Krohn, Lanza-Kaduce, & Radosevich, 1979; Bandura, 1977; Bukowski, 1986; Hawkins, Catalano, Kosterman, Abbot, & Hill, 1999; Hawkins, Catalano, & Miller, 1992; Winfree & Bernat, 1998; Winfree, Sellers, & Clason, 1993). Role models draw

the attention of the adolescent and create a lasting impression upon the beliefs or norms of that adolescent. As the behavior is repeated and reactions to the behavior are positively reinforced, the behavior changes and becomes acceptable and desirable to the adolescent. Emotional links with peers who model a drug-free lifestyle may serve to reinforce sobriety for those struggling with substance abuse (Hawkins, et al., 1999, p. 228). Social learning theory suggests that behavior promoting sobriety may be positively affected by promoting social bonding with sober role models within the school environment.

Social learning theory provides an analytical lens for investigating interventions designed to reduce recidivism and promote abstinence. A promising intervention involves recovery-based schools, which share the following principles: (1) Staff members and students are committed to a drug-free lifestyle. (2) providing state-recognized academic programs specifically designed for students in recovery, (3) providing academic and recovery services, as well as, post-treatment support, (4) requiring that all students be committed to sobriety and are working a program of recovery while attending school, (5) offering academic courses for high school credit and assisting students while transitioning to another high school, to a career, or to college, and (6) establishing a plan to handle the therapeutic and crisis needs of students (Association of Recovery Schools, 2006). In recovery schools, personal connections are encouraged between recovering students, between the staff and the students, and between the students and the wider sober community such as AA/NA. The social networks provided by recovery schools may aid the recovering adolescent (Rhodes & Jason, 1990). The number and quality of these social networks have been shown to be

related to teenage recovery from addiction (Richter, Brown, & Mott, 1991). These findings indicated that the more nondrug-using friends and family members in the lives of teenagers returning from treatment, the greater the rate of abstinence. Positive role models reinforce abstinence and demonstrate coping strategies for recovering adolescents (Richter, et al., 1991, p.383). Within this positive environment, recovery-based schools aim to create a new dynamic whereby the popular students become role models for abstinence. Thus, recovery-based schools may provide better role models for students in recovery.

Recovery schools may provide a social setting where popular nondrinking students provide sober role models for other students and therefore deter drinking behavior. Thus, recovery-based schools seek to provide positive social role models, replacing the reinforcing effects of drug-using peers with the reinforcing effects of nondrug-using peers and improving the likelihood of continued sobriety.

In summary, social learning theories suggest that behaviors are reinforced by the attitudes, norms, and behaviors of perceived significantly important social groups; that identification with this social group will encourage the imitation of those behaviors; and that a social attachment or bond will be created which will continue to influence that behavior. Results from previous research indicate that nondrug-using role models may prevent relapse and consequently influence academic performance for the student returning from substance abuse treatment. It is thought that the number and quality (defined as nondrug-using) of socially significant role models will prevent relapse and influence academic attendance, engagement, and performance of returning students in recovery. These theories suggest that as the positive role models become more

important to the recovering adolescent; their behaviors will be imitated by the adolescent thus affecting academic attendance, engagement, and performance. Over time, the recovering adolescent may develop a social bond, or attachment, to the perceived socially important role models and could react to their positive or negative reactions to the adolescent's behavior. Thus, the reactions of the role models may positively influence the adolescent's attendance, engagement, and academic performance.

Recovery-based schools aim to provide the necessary social and educational support needed for students returning from substance abuse treatment and may provide better role models for the newly admitted student. Although recovery-based schools offer a promising educational environment for students returning after substance use treatment, very little research has been published regarding this alternative educational setting. The available research (Diehl, 2002; Moberg & Thaler, 1995) (Bowermeister & Finch, 2003; Finch, 2003; Horowitz, 2000; Rubin, 2002; and Teas, 1998) suggests that students in recovery have unique educational and behavioral needs which may be met within an alternative learning environment such as a recovery-based school.

Research suggests that the unique academic and behavioral needs of recovering students may be met within alternative learning environments such as recovery-based schools. Research has also indicated that the number and quality of socially significant role models can influence relapse behavior. What is not known is how behavior is changed within the recovery-based school environment. Using social learning theory, several questions emerge. Who are the role-models for students attending recovery schools and what behaviors do these role models exhibit? To what extent are

recovering students influenced by recovery school role models to change their drinking behavior? To what extent are changes in behavior reflected in improved school performance? To the extent that recovering students emulate positive role models, what can school administrators do to foster positive role models and foster attachment of recovering students to those role models? Thus, the purpose of the proposed study is to identify the role models in recovery schools, document their behavior, investigate the extent to which adolescents in recovery-based schools are influenced by role models, and formulate recommendations for school administrators.

Chapter 2: Literature Review

No ethical clinician would treat an adult alcoholic and upon discharge recommend that the newly recovering person spend six hours a day in a bar. However, that is exactly what we do with the adolescent. For that adolescent, school is the 'bar.' That is where the alcohol is. That is where the drugs are. That is where the pressure to use is found.

- Shulman, 1985, p. 21

Underage drinking and illicit drug use are major problems for our schools. Data from several student surveys indicate that approximately 80% of high school seniors have tried alcohol. Almost half of the seniors have consumed alcohol in the last thirty days, and about a third have participated in binge drinking. Just under half of students have tried an illicit drug during his or her lifetime before high school graduation (Johnston, O'Malley, Bachman, & Schulenberg, 2008; Substance Abuse and Mental Health Services Administration, 2008; Minnesota Department of Education, 2007). Not only is substance use high among students but according to the National Survey on Drug Use and Health (NSDUH) (Substance Abuse and Mental Health Services Administration, 2008) approximately 1.8 million students needed treatment for alcohol or illicit drug problems in 2007 but did not receive it. Studies have indicated that the relapse rate for adolescents can range from 35% to 85% (Catalano, Hawkins, Wells, Miller, & Brewer, 1991; Brown, Vik, & Creamer, 1989; Vaillant, 1988; Winters, Stinchfield, Opland, Weller, & Latimer, 2000a). The combination of high numbers of students with substance use problems, the low number of students receiving treatment, the high relapse rate among adolescents has led to significant individual and social consequences including: interfering with adolescent brain development which may affect decision making, impulsivity, memory, and emotional reactions; an increase in

susceptibility for later alcohol dependence; death or physical injuries to self and others; high risk sexual behaviors which could result in unwanted pregnancy, rape, sexual transmitted diseases or HIV/AIDS; and psycho-social issues.

Prevalence. Two national surveys and one Minnesota statewide student survey are conducted annually to provide a picture of licit and illicit adolescent drug use. The NSDUH (Substance Abuse and Mental Health Services Administration, 2008) has been conducted annually since 1971 and is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services. A representative sample of 67,870 civilian, non-institutionalized persons twelve years old or older were given face-to-face interviews regarding illicit and licit drug use in 2007. Approximately 121 million people (50.3%) over the age of 12 drink alcohol compared to 10.9 million (8.0 %) over the age of 12 who currently use illicit drugs. Illicit drug use affects about 9.5% of students aged 12 to 17. Survey results for 12 to 17 year olds included the following current illicit drug use (used previous month): marijuana (6.7%), nonmedical use of prescription-type psychotherapeutics (3.3%), inhalants (1.2%), hallucinogens (0.7%), and cocaine (0.4%). From 2002 to 2007, illicit use of adolescents declined from 22.6% to 9.5%. Underage drinkers include: current users (10.8 million, or 15.9%), binge drinkers (7.4 million, 9.7%), and heavy drinkers (2.4 million, 2.3%). Survey results for 12 to 17 year old alcohol use also included: lifetime use (40.4%), past year (32.9%), and past month (16.6%). The trend over the last three years has shown little change regarding alcohol use for students 12 to 17 of age. Approximately 8.8% of adolescents were classified as having a substance abuse or substance dependent problem,

Monitoring the Future (Johnston, et al., 2008) is an ongoing study from the University of Michigan which receives financial support from the National Institute on Drug Abuse which is part of the National Institutes of Health. Information has been collected since 1975 on the behaviors, attitudes and values of American high school students. Approximately 48,000 8th, 10th, and 12 grade students from 403 secondary schools were surveyed in 2007. Results from this survey indicate that more than three out of every four students have consumed alcohol by the end of high school and nearly half have done so by the 8th grade. More than half of the 12th graders and a fifth of the 8th graders in 2007 reported having been drunk at least once in their life. Monitoring the Future's thirty year perspective indicates that binge drinking for adolescents reached a peak in 1979, declined in the 1980's, increased slightly in the early 1990's and then leveled off around 2000. A drop in drinking and drunkenness appeared for all grades in 2002. However, twelfth graders slightly increased their drinking and drunkenness in 2004.

Illicit drug use. Approximately 47% of high school seniors reported using an illicit drug. 41.8% of seniors reported using marijuana and 26% of seniors reported using an illicit drug other than marijuana. The percentages of 10th graders using illicit drugs include: 18.2% lifetime use, 31.0% marijuana, and 18.2% any illicit drug other than marijuana. Some of the illicit drugs on the Monitoring the Future survey include: marijuana, prescription drugs, heroin, OxyContin, Vicodin, sedatives, tranquilizers, Crystal Meth, anabolic steroids, LSD, cocaine, crack, escstasy, inhalants, and over-the-counter cough and cold medicines.

The Minnesota Student Survey (Minnesota Department of Education, 2007a) has been available to all elementary and secondary schools, alternative learning centers, charter schools, tribal schools and youths in juvenile correctional facilities and residential treatment facilities since 1989. An interagency team including the Minnesota Department of Education, the Minnesota Department of Health, the Minnesota Department of Human Services, the Minnesota Department of Public Safety, and the Minnesota Department of Corrections, administers the survey to sixth, ninth, and twelfth graders every three years. The purpose of the survey is to assess health, safety and academic behaviors of Minnesota youths. 91% of school districts participated in the 2007 survey.

Alcohol use. The results from the 2007 Minnesota Student Survey indicate a general decline in alcohol use by 6th, 9th, and 12 graders since 1992. Students reporting that they had drunk alcohol at least once in the last year included: 37.4% ninth graders, and 62.7% twelfth graders. Frequent drinking was defined as drinking on 20 or more occasions in the last 12 months. Frequent drinking was reported by 4.4% of 9th graders and 17.6% of 12th graders. The percentage of 9th grade binge drinkers decreased slightly from 15.3% to 12.9%. Binge drinking remained steady for 12th graders. One third of twelfth graders reported binge drinking at least once in the past two weeks.

Illicit drug use. Marijuana use was reported by 15.4% of 9th graders and 30.7% of 12th graders. Percentages of responses for other drug use included: inhalants (3.7% 9th graders, 2.6% 12th graders), crack/cocaine (2.4% 9th, 5.3% 12th), LSD/psychedelics (2.9% 9th graders, 5.2% 12th graders), MDMA/ecstasy (2.6% 9th grade, 4.5% 12th grade), and methamphetamines (1.5% 9th graders, 2.2% 12th).

Prevalence summary. Comparing the alcohol prevalence rates from the 12-17 year old of the NSDUH 2007 and the rates from grades 8 and 10 from Monitoring the Future (MTF) (Johnston, et al., 2007), alcohol use appears to be declining slightly. In 2007 lifetime use (40.4% NSDUH; 54.1% MTF), use within the last twelve months (32.9% NSDUH; 47.5% MTF), and use within the past month (16.6% NSDUH; 26.9% MTF) continue to be a serious health risk for adolescents. Information from Monitoring the Future 2007 and the Minnesota Student Survey 2007 indicate that almost a third of twelfth graders have participated in binge drinking in the past two weeks. These statistics are particularly disturbing when research has shown the devastating effects of alcohol on the adolescent's developing brain and young adolescent's susceptibility for alcohol dependence in later years.

Consequences. The large number of adolescents who relapse and the pervasive use of alcohol among adolescents have led to tragic individual and social consequences. Adolescence is a period of intense physical and emotional maturation. Social identity and the struggle toward independence are hallmarks of this critical developmental stage. Alcohol's effects can complicate this stage by interfering with brain development which may affect decision making, impulsivity, memory, and emotional reactions. Physical, emotional, and social consequences may have lifelong effects for the adolescent, as well as those in his or her social circle. Some of these consequences include: (1) susceptibility for alcohol dependence (Grant & Dawson, 1997); (2) death and physical injuries to self and others (Hingson, 2003; Center for Disease Control and Prevention, 1998; Kinney, 2003; National Highway Traffic Safety Administration, 2004a; National Highway Traffic Safety Administration, 2004b; Schukit, 2000; Minnesota Department

of Public Safety, 2002; Roizen, 1997; Inaba, 2004); (3) high risk sexual behavior which could result in unwanted pregnancy, rape, sexual transmitted diseases or HIV/AIDS (Winters, Stinchfield, Opland, Weller, & Latimer, 2000b; Center for Disease Control and Prevention, 1994; National Institute on Drug Abuse, 1996; Maier and West, 2001; May & Gossage, 2001; MacKenzie, 1993; Di Clemente, 1990, Abbey, et al. 2001); and (4) psycho-social issues involving mental illness as a dual diagnosis, delayed developmental growth, and the impact upon valued personal relationship including the family (Drug Strategies, 2003, Winters, et al., 2000b).

Susceptibility for dependence. Some studies have indicated that the earlier alcohol use is initiated; the greater the chance for adult alcohol dependence. Grant and Dawson (1997) found that youth who begin drinking alcohol before age 14, have a 41% chance of developing alcohol dependence during their lifetime compared to those who wait until the age of 21 when the lifetime risk is reduced to 10%. Although environment and genetics play a role in the development of alcohol dependence, age of onset appears to be quite significant. During adolescence, the brain is constantly developing and changing. Alcohol's interactions with the developing brain may leave lasting effects.

Death and physical injuries. The leading cause of death for individuals between the age of 16 and 20 is unintentional injury primarily caused by motor vehicle accidents of which one in three are alcohol related (Hingson, 2003). Another report states that unintentional injuries, including motor vehicle accidents, account for 29% of all adolescent deaths. Approximately 50% of these deaths are alcohol-related (Center for Disease Control and Prevention, 1998). Moreover, in the United States, 73.6% of all deaths for individuals aged 10-24 result from motor vehicle crashes, other unintentional

injuries, homicide, and suicide. All of these are related to alcohol consumption (Kinney, 2003).

In 2004, approximately 39% of motor vehicle fatalities (42,636 people killed) involved alcohol use in the country and 31% in Minnesota (National Highway Traffic Safety Administration, 2004a). Among 15-19 year olds, one third of the traffic fatalities were caused by drinking and driving (Minnesota Department of Public Safety, 2002). 1.4 million drivers were arrested in 2003 for driving under the influence of alcohol or narcotics (National Highway Traffic Safety Administration, 2004b). Students responding to the NSDUH Survey 2007 reported that 10.2% of 16-17 year olds and 20.2% of 18-20 year olds drove under the influence of alcohol. Responses from the Minnesota Student Survey 2007 indicate that 24.1% of 12th graders had operated a vehicle after using alcohol or drugs within the last year. When asked if they ever ride with friends after they had been using alcohol or drugs, 36.8% of the 12th graders responded that they had (Minnesota Department of Education, 2007a).

Among adult alcoholics, suicide rates are twice as high as for the general population (Schuckit, 2000). In Minnesota, nearly half of all teen suicides each year and more than half of all adolescent deaths involved alcohol (Minnesota Department of Public Safety, 2002). Victim reports of violent criminal behavior and alcohol include: 15% of robberies, 26% of aggravated assaults, and 50% of all homicides (Roizen, 1997; Inaba, 2004). Emergency room visits also reflect startling statistics related to alcohol and unintentional injuries. In the general population about 15%-25% of emergency room patients tested positive for alcohol (Inaba 2004). A state-wide study of all emergency room visits by those age 12-25, found 32% were positive for alcohol (breaks down for

each age group) (Kinney, 2003). Another study involving adolescents age 14 or 15 who had been seen in an emergency room for life-threatening injuries, 71% tested positive for alcohol or drugs. (Kinney, 2003).

High risk sexual behavior. Consequences of unprotected or unwanted sex may lead to unexpected teen pregnancy with high risks for FAS and mental retardation; sexually transmitted diseases and HIV/AIDS; and an increased risk for sexual assaults and date rape. Two studies indicate a positive relationship between alcohol and sexual activity. One study from Massachusetts (Winters, et al., 2000b) found that of the two-thirds of the 16 to 19 year olds who engage in sexual intercourse, 64% of them reported using alcohol. The Youth Risk Behavior Survey from the CEC found that of the currently sexually active students (53.1%) of ninth through twelfth graders, 24.8% reported that they had used alcohol or drugs prior to their last sexual intercourse (Center for Disease Control and Prevention, 1994).

Approximately 4.9% of females under the age of 18, had given birth in 1996. Among this group, an estimated 12.4% used alcohol (Winters, et al., 2000b). Besides the dangers present for young women giving birth, fetal alcohol syndrome (FAS) and mental retardation are conditions directly related to alcohol consumption (Maier and West, 2001; May & Gossage, 2001). Alcohol also increases irresponsible sexual activity and has been found to decrease the likelihood that a condom will be used during intercourse, reduces the selectivity of partners, increases the number of partners, and the likelihood of risky sexual practices (MacKenzie, 1993; Winters, et al., 2000b) All of these behaviors that would increase the risk of STD's and HIV/AIDS. Numbers related

to sexual assault victims and perpetrators using alcohol range from 34% to 74% (Abbey, Zawacki, Buck, Clinton & Ausian, 2001)

Psycho-social issues. More than two-thirds of adolescents in drug treatment also meet the diagnostic DSM-IV criteria for mental health issues including: depression, anxiety, post-traumatic stress, and conduct disorders (Drug Strategies, 2003). Not only are the consequences of a possible mental illness a concern, but so, too is the compromised psychological and social development due to the effect's of alcohol which can change the way the adolescent approaches and experiences social interactions (Winters, et al., 2000b). Dealing with failure, boredom, social anxiety, unhappiness, rejection, low self-esteem, and peer-acceptance can become difficult goals for the adolescent dealing with substance issues. Valuable social relationships such as the family and close friends may be compromised, as well as educational opportunities, because of these psycho-social consequences.

Treatment need. Data from the NSDUH 2007 survey (Substance Abuse and Mental Health Services Administration, 2008) indicate that approximately 7.9% (or 2.0 million) of the adolescent population needed treatment for an alcohol or illicit drug problem in 2007. Only 150,000 of 12 to 17 year olds received treatment which leaves approximately 1.8 million youths who needed treatment but did not receive it. Not only is there a significant number of students in our schools with substance abuse problems but those students are not receiving appropriate treatment.

Relapse. Not only are there high numbers of adolescents using alcohol and a small number of students receiving substance abuse treatment, but relapse rates for those receiving treatment are high (Catalano, Hawkins, Wells, Miller, & Brewer, 1991;

Brown, Vik, & Creamer, 1989; Vaillant, 1988; Winters, Stinchfield, Opland, Weller, & Latimer, 2000a). The definition of relapse can vary among research studies from a “slip,” which is a one-time use after treatment, to drug use that is comparable to pre-treatment levels. Catalano, et al. (1991) reviewed thirteen treatment effectiveness studies and found that these studies “have shown some success in reducing drug use during treatment, however maintaining these gains after treatment has been more difficult” (p. 1086). The adolescent rate of relapse ranged from 35% to 85%, which is comparable to the adult rate. Approximately two-thirds of adults relapse within 90 days of treatment. This study suggests that relapse continues to be a problem for adolescents after treatment.

One of the first studies dealing with adolescent relapse involved structured interviews given to seventy five chemically dependent teens and at least one of their parents during the teens’ treatment, three months following treatment, and after six months of treatment. Brown et al. (1989) examined the rates of adolescent relapse, situational features surrounding initial relapse episodes, and the differences between major and minor relapses. They found that approximately 36% of the teens were abstinent after three months and 30% continued to be abstinent after six months. Of those who relapsed, nearly two-thirds reported their initial relapse had occurred during the first three months after treatment. One third of those who relapsed during the first three months abstained during the next three months. Those who had multiple relapses during the first three months were at risk for returning to previous levels of drug usage.

Socializing and peer pressure were involved with the majority of relapses. Approximately ninety percent of first relapses took place in the company of other

people. Forty-four percent of relapses involved socializing with pre-treatment friends. Major relapses involved relapses less than a month after treatment, using with peers older than the teen, relapses involving pre-treatment peers, using peers as being most important to the teen, viewing others as using more than one's self, relapse involving more than three people, and about 20% of people present were abstainers. Minor relapses, defined as a one-time occurrence, involved relapses occurring more than a month after treatment, peers of the same age, casual post-treatment peers, felt that the teen was the one who was using the most, most important person was a non user, and 58.30% to 91% abstainers were present. These findings suggest the importance of isolating teens from peer users in order to reduce relapse rates.

Addicts recover very slowly. Vaillant (1988) followed a heroin cohort and alcohol cohort, of 100 clients each, after hospitalization for twelve years. Interviews were given to the patients and relatives. Self reports of use and records from half-way houses, detoxification units, and counseling programs were used to determine continued substance use. Social security records (work history) and police records were also used. Information was gathered at five or more different points of time for more than 95% of the subjects. Within two years of leaving the hospital, 95% of both groups relapsed. Over eight years, the average alcoholic detoxification fifteen times. Abstinence rates included 24% at 4 years, 32% at 8 years, and 25% at 12 years. 37% had died eleven to fourteen years after admission. Of the one hundred alcoholics, 29 were abstinent 3 or more years and, of those 29, 14 had attended 300 or more Alcoholics Anonymous (AA) meetings. He concluded that there should be more emphasis on relapse prevention and not just on detoxification. He advocates for continued supervision, establishment of new

social supports, and mechanisms to help structure the addict's life, such as parole or AA. This study emphasizes the need to address aftercare issues, especially social relationships.

More recently Winters et al. (2000a) evaluated the effectiveness of the Minnesota Model of treatment which "emphasizes a life-style change organized around the AA philosophy" (p. 602). Drug use was measured before (twelve and six months) and after treatment (six and 12 months) using items from the Personal Experience Inventory (Winters & Henly, 1989), parent reports, and urinalysis from a sample of 179 adolescents in the treatment group and 66 adolescents in the wait-list group. Results indicate that six months after treatment, the treatment group included: abstinent (29%), minor relapsers (25%), and relapsers (46%). Twelve months after treatment, the treatment group included: abstinent (19%), minor relapsers (25%), and relapsers (56%). Among those from the treatment group who did not complete the program, 15% were either abstinent or minor relapsers. Twenty-seven percent from the wait-list group were either abstinent or minor relapsers. Although relapse rates continue to be high for adolescents, the Minnesota Model incorporating the recovery philosophy of AA appears to be effective for the majority of adolescents.

Summary. Underage drinking continues to be a significant social problem. Approximately 10.8 million (28.7%) people between the ages of 12 and 20 consumed alcohol within the last month. Compared to the approximate illicit drug use of 10.6%, alcohol continues to be the drug of choice for adolescents. Binge drinking and heavy drinking have led many to seek treatment. However, only 150,000 of the 2.0 million of adolescents needing treatment actually received treatment. Not only are there many

adolescents with substance issues that are not being addressed but those who complete treatment face the prospect of high relapse rates (35% to 80%). The drug use behavior of adolescents has personal and social consequences including: interference with brain development; susceptibility for later dependence; increased risks for death and unintentional injuries, high risk sexual behavior, dual diagnosis for emotional problems, delayed developmental growth, and impact upon family and personal relationships. Identifying and manipulating factors influencing drug use behaviors may help to reduce the problem of adolescent substance use.

Supportive Social Network

Looking more closely at factors influencing relapse prevention, studies suggests that relapse may be prevented by reducing contact with drug-using peers and providing a supportive social network (Brown et al., 1989; Catalano & Hawkins, 1985; DeJong & Henrich, 1980; Shoemaker & Sherry, 1991; Latimer, Winters, Stinchfield, & Traver, 2000; Vaillant, 1988). Using network mapping and q-sorting, the linkage between social network characteristics and relapse factors were analyzed at one month and three months after treatment. Comparing those who relapsed and those who maintained sobriety, significantly different social networks developed when compared to pretreatment networks. Those who continued to use drugs after treatment had significantly greater reinforcement for drug use than did those who did not (Catalano et al., 1985). These findings suggest that relationships that do not include drug-using peers will increase the likelihood of recovery.

DeJong and Henrich (1980) analyzed the relapse attitudes of 89 clients attending a rehabilitation center for young people (ages 16-27) in Germany. This group of severe,

hard drug users was given an inventory at the time of intake, during treatment, and at five intervals after discharge (1, 3, 6, 12, 24 months). Outcome measures included: abstinence, continued drug use, institutionalized (prison or treatment), unknown, or deceased. One third of the sample was drug-free at each follow-up interview up to two years. Among those who had completed the program, eighty percent were drug-free. Prognosis is much better if clients complete the program. If these completers relapse, they still have a better chance toward recovery. Factors associated with relapse include: lack of involvement in productive activities (work, school, and leisure activities), return to the environment where the adolescent previously used drugs, and failure to establish social contact with non-using adolescents. From their experience, they feel that “stable abstinence from drugs depends on using aftercare methods for prevention of relapse, aiding the search for new friends, and providing satisfactory work or educational conditions.” This study emphasizes the importance of establishing new social networks that include drug-free peers.

Shoemaker and Sherry (1991) were interested in identifying the variables most likely to influence adolescent short-term post-treatment outcome. One hundred and forty-four inpatient adolescents were given a questionnaire based on problem severity, environmental factors, and psychological factors based on the Cronkite and Moos model for adults (Cronkite & Moos, 1980) at the time of intake, during treatment, and three months after treatment. Ninety-four percent of the adolescents completed the questionnaire. Post-treatment psychosocial environment measures and pre-treatment problem severity indicators consistently made significant contributions to positive short-term treatment outcomes. This study supports the influence of the social

environment, particularly the family and peers, on successful adolescent recovery.

Pretreatment variables cannot be manipulated at the post-treatment stage. However, this study points out post-treatment factors such as the social environment and peers that could help with recovery.

The purpose of this study was to examine the influence of demographic, individual, interpersonal, and treatment factors when predicting continued drug use after treatment (Latimer, Winters, Stinchfield, & Traver, 2000). PEI, ADI, and chart records were used to evaluate 225 adolescents attending residential and nonresidential programs for substance abuse and their parents at intake and at six and twelve months after treatment. During the first six months of aftercare, pretreatment levels of sibling substance use and aftercare participation predicted alcohol and marijuana use. At six months post-treatment, post-treatment levels of deviant behavior, pre-treatment levels of sibling use, and aftercare participation predicted the use of marijuana. Between six months and twelve months, pre-treatment peer use, six months of post-treatment marijuana use frequency, psychological substance dependence and peer substance use predicted marijuana use. At twelve months, sex, pretreatment peer substance use at intake, treatment length, six-months of post-treatment, and peer substance use predicted substance use. This study found that those participants who had substance using friends at six months of their post-treatment were associated with their own subsequent use between six and twelve months post-treatment. These findings support the findings that being male, having siblings who use, and having friends who use are at risk of higher relapse, and that longer treatment and protective function of aftercare and reduce relapse. Aftercare and peer relationships are stressed as important factors contributing to

recovery. Providing a school environment with non-using peer models may benefit the recovering adolescent.

Aftercare Programming, Relapse, and Schools

The importance of an aftercare plan has been recognized as a key component for preventing relapse. Spear and Skala (1995) stresses the importance of providing post-treatment services as part of the continuum of care for substance abuse treatment. The purpose of aftercare is to facilitate the transition from primary treatment to maintaining a drug-free lifestyle. However, the fundamental goal is to prevent relapse (Catalano, et al., 1985). Schools are the environment post-treatment teens spend most of their time in, and aftercare factors should be taken into consideration when looking at educational settings.

Students and school alcohol use. Although schools may adopt a “zero tolerance” policy toward drugs, the availability and consumption of alcohol on school grounds continues to be a problem. According to Spear and Skala (1995), “virtually all post-treatment adolescents returning to their old school report being offered drugs on their first day back.” (p. 350). The results from the Minnesota Student Survey (Luehr, 2005) can be used to as one indication of the drug activity within public schools. Every four years since 1975, sixth, ninth, and twelfth graders in Minnesota have been given a questionnaire regarding their perceptions and use of alcohol at their school. The 2005 Minnesota Student Survey compared students attending traditional middle school and high schools with alternative education settings. When asked if student use of alcohol or drugs was a problem at their school, approximately fifty percent of students attending both traditional schools and alternative settings either agreed or strongly agreed that it

was a problem. When asked if anyone had offered, sold, or given the student an illegal drug on school property, approximately 40% of the traditional students and 30% of the alternative students said yes. Time of drug use varied considerable from traditional settings and alternative settings. The survey indicated that they used drugs or alcohol before school (about 7% traditional, 33.5% alternative), during school (about 6% traditional, 22% alternative), and right after school (about 12% traditional, 45.5% alternative). Twice as many alternative students indicated that they had alcohol or drugs in the last year as compared to traditional students (80%, 41.7% respectively). Binge drinking answers varied significantly from traditional students (9.3%) to alternative students (30.5%). When asked if the student had ever been treated for an alcohol or other drug problem, 4.25% of traditional students and 22.5% of alternative students indicated that they had received treatment. Approximately 80% of traditional students indicated that they had not driven a car under the influence of alcohol or drugs, as compared to approximately 40% of alternative students. Approximately one third of the traditional students and two thirds of alternative students had ridden in a car with a friend who had been driving after drinking.

Peer Relationships

Adolescents who associate with substance using friends are more likely to use substances themselves. Research looking more closely at these relationships include: social learning theory (Akers, 1979; Winfree, 1998;); social development theory (Hawkins, 1992; Svensson, 2000); peer clusters (Oetting and Beauvais, 1986; Swaim, 1998; Oetting, Edwards, Kelly, & Beauvais, 1997), friendships similarities (Kandel,

1978a;1978b; Cleveland and Wiebe, 2003), and the peer selection versus peer influence (Curran, 1997; Schulenberg et al. 1999; Cumsille et al, 2000).

Social learning theory. This theory suggests that drug use may be viewed as a socially acquired behavior that is initiated and reinforced by drug-using friends. Principles for this theory include: (1) the relationship between positive and negative reinforcement influencing behavior, (2) the importance of repeating behaviors through imitation and modeling, and (3) the importance of norms, attitudes, and orientations of socially significant groups such as peers, family, and schools. According to Akers, Krohn, Lanza-Kaduce, and Radosevich (1979), “the probability of abstinence decreases and the frequency of use increases when there is greater exposure to using rather than to abstinent models” (p. 639). In an effort to explain drug and drinking behavior using the social learning theory framework, Akers et al. (1979) collected data from 3,065 students in seventh grade through twelfth grade using a self-report questionnaire. Approximately five percent of this sample was interviewed individually between two and eight weeks after the questionnaire was administered. Results indicate that “friends provide social reinforcement or punishment for abstinence or use, provide normative definitions of use and abstinence, and, to a lesser extent, serve as admired models to imitate” (p. 644). This study suggests that adolescent drinking behavior may be modified by nondrinking, as well as, drinking peers.

Supported by the National Institute of Justice, Winfree and Bernat (1998) evaluated the ability of social learning theory and control theory to predict substance abuse. Data were collected from the National Evaluation of the Gang Resistance Education and Training program (Esbensen, 1995) which surveyed all eighth graders in

eleven localities. Winfree and Bernat based their analysis on two very different school districts included in this program: Las Cruces, New Mexico, and Phoenix, Arizona.

Their results indicate that both theories predict substance use and that the differential definitions (i.e. what behaviors and attitudes are acceptable to the group) for both school districts predicted substance use. This study suggests that reinforcing positive attitudes and behaviors of the peer group may influence substance use.

Using social learning theory, peer relationship may be examined in terms of the attention, retention, reproduction, motivation, and self-regulation (Bandura, 1986). Who are the attention-getters and what draws attention to them? Does repeated exposure aid in retention of the behaviors? What are the positive and negative reinforcers affecting the behavior? What are the underlying norms and values of the group influencing the behavior?

Social development theory. One of the strongest influences of alcohol use among adolescents is peer alcohol use. Hawkins et al. (1992) presented an overview of research studies dealing with Contextual factors (societal and cultural) and Individual and Interpersonal factors influencing adolescent drug use. They found that one of the strongest correlates of alcohol use among adolescents is the association with others who use drugs. Using elements from social learning theory (Bandura, 1977), Hawkins et al. developed the social development theory which views drug use as a socially acquired behavior that is initiated and reinforced by drug-using others (Bukoski, 1986). They advocate a risk-focused approach where protective factors, such as social influence resistance interventions, would mediate or moderate the risk factor. Although this study deals with pretreatment peer use, these factors may apply to the teen in recovery. The

relationship between the recovering teen and pretreatment drug-using peers may be mediated by learning resistance interventions and removing them from those peers.

Also interested in identifying risk factors, Svensson (2000) collected data from a questionnaire that was distributed to 467 Swedish fourteen and fifteen year olds. Time spent with friends, peer deviance, and parental monitoring produced the largest effects on drug use for narcotics, alcohol, and tobacco. Peer factors were also dominant for sporadic and regular use of alcohol and tobacco. He cautions that spending leisure time with their friends “run an increased risk of engaging in antisocial behavior” (p. 89). This study emphasizes the importance of the teen’s social life and the importance of monitoring teen activities.

Developed by Hawkins et al. (1992), social development theory seeks to identify those factors which act either as risk factors or protective factors for substance use in the adolescent’s social world including the family, school, and community. This theory seeks to find those factors that are most reinforcing which create the strongest bonds and attachments to the adolescent. Strengthening those bonds may help to prevent substance use.

Peer cluster theory. Stressing the importance of peer relationships, the peer cluster theory suggests that peers have a direct influence of adolescent drug use. The following studies suggest that associating with a drug-using peer group would encourage drug use and strengthen the bonds within that group but that other prosocial groups, such as schools, could influence non drug using behavior (Oetting and Beauvais, 1986; Swaim, 1998; Oetting, Edwards, Kelly, & Beauvais, 1997).

After identifying a range of psycho-social characteristics related to drug involvement through drug surveys and finding that the highest positive correlations were with peer encouragement to use drugs and the highest negative correlations were with peer sanctions against using drugs, Oetting and Beauvais (1986) developed the peer cluster theory. This theory suggests that “small, identifiable peer clusters determine where, when, and how drugs are used and that these clusters specifically help shape attitudes and beliefs about drugs” (p. 19). Unlike peer pressure, all members of peer clusters influence the behavior of the group rather than acting as a passive member of the group. Emphasizing the importance of attachment to the group, associating with deviant peers would likely lead to deviant behaviors. Alternatively, attachment to nondeviant peers would lead to nondeviant behaviors (Swaim, 1998). Other factors such as family, church, and school primarily affect drug use by indirectly influencing the type of peer cluster formed (Edwards, 1994). The strong connections between the family and school which support prosocial norms and behaviors toward drinking can help to build friendships among young people who share those positive norms and ideals (Oetting, Edwards, Kelly, & Beauvais, 1997). This theory seeks to explain substance use by emphasizing the important connections between adolescents and peer clusters.

Seeking to determine the drug use and social risk factors among rural students, Oetting et al. (1997) analyzed the data from a self-report survey which had been administered to 1,656 rural 7th and 8th graders and 1,205 rural 11th and 12 graders. Results for drug involvement included: high drug involvement (5.3%, 7th and 8th graders; 13.6%, 11th and 12th graders), moderate drug involvement (17.1%, 7th and 8th

graders; 18.6%, 11th and 12th graders), and low or no involvement (77.6%, 7th and 8th graders; 67.8%, 11th and 12th graders). Previous research indicated that 90% of adolescents who use drugs have friends who use those same drugs (Dinges and Oetting, 1993). Results from the current study confirm these results. However, fewer 11th and 12th graders were asked to use drugs than 7th and 8th graders. Approximately 80% of the nondrug using students reported that they had friends who would try to stop them from using drugs. Peer encouragement to use drugs and peer sanctions against using drugs appear to be important psycho-social factors which may influence adolescent drug use.

Targeting Mexican-American and white non-Hispanic school dropouts, Swaim, Bates, and Chavez (1998) sought to understand the relationship between drug involvement, school adjustment, and peer drug associations. Data collected from 910 former students who had taken the Clinical Drug Assessment Scale (Oetting, et al, 1984) were analyzed. Consistent with peer cluster theory, they found associating with drug-using peers greatly increased the likelihood of drug use and that school adjustment for Mexican-American males and females acted as a protective factor against association with drug-using peers. The researchers suggest that “attachment to school represents bonding to prosocial norms and should help to prevent deviance” (p. 136). This study suggests that association with drug-using peers may be a key predictor of substance use by both students and school dropouts.

Peer selection vs peer pressure. Looking more closely at how friendships are formed, researchers have explored whether or not adolescents seek out a drug-using peer group or if the adolescent yields to pressure from his or her existing peer group to

conform to the group's drinking behavior. Friendship similarities have been found by Kandel (1978a; 1978b) and Cleveland and Wiebe (2003), however, research is inconclusive regarding peer selection and peer pressure (Curran, Stice, & Chassin, 1997; Schulenberg, et al., 1999; Cumsille, Sayer, & Graham, 2000).

Friendship similarities. Structured, self-administered questionnaires regarding illicit drug use were given to high school boys and girls from two suburban schools, two rural schools, and New York City at the beginning and end of the 1971-72 school year (Kandel, 1978a; 1978b). They were also asked to identify their best friends in order to create friendship dyads. She was interested in how similar (degree of homophily) the dyads were and if these dyads changed over time. Besides the demographic factors of grade in school, sex, race, and age, attitudes toward illegal drug use was the most common attribute between friends. Stable friendships shared the highest degree of homophily and these similarities increased over time. Dyads that had broken up during the course of the school year shared fewer beliefs and behaviors with the exception of political orientation. She suggests that “deviant activities in particular need the support of the peer group for their initiation as well as their sustenance” (Kandel, 1978b). Students in an environment with similar attitudes toward recovery may establish friendships that would strengthen new attitudes and behaviors toward drugs.

Using data sets from the National Longitudinal Study of Adolescent Health (Add Health) and Hierarchical Linear Models (HLMs), Cleveland and Wiebe (2003) found that peer and individual substance use of seventh through twelfth graders correlated and that their usage varied with the overall level of substance use found in the schools. Respondents were drawn from the In-School data set. These individuals

were asked to nominate a list of friends who were also part of this data set. Before calculating school use means, the respondent and their peers were removed from the total. Three models were used to evaluate the data. The first model indicated the amount of individual variance between schools. The second model used peer use as a predictor of individual use. Finally, the third model looked at school-level substance use as a predictor of individual and peer substance use. Results demonstrated that school context does influence individual and peer use. In low-use schools, “substance users are more likely to remain in peer groups with nonusers, and nonusers are less likely to be subjected to strong social and cognitive social pressures to use” (Cleveland & Wiebe, 2003, p. 281). High-use schools may lead to more homogenous using and abstaining peer groups. If schools become low-use schools, the dynamics between non-users and using peers would have a better chance of changing. Restricting the presence of using-peers could positively affect the recently recovering adolescent.

Looking more closely at the relationship between peers and adolescents, Curran, et al. (1997) found a bidirectional relationship between peer alcohol use and adolescent alcohol use. Children of Adult Alcoholics (COAs), their parents, and a control group of non COAs and their parents were given computer-assisted interviews during three times over a three year period. Demographic information, parent’s alcoholism, peer alcohol use, adolescent alcohol use, and adolescent rebelliousness data were collected from 363 families. Latent growth (LG) modeling and autoregressive (AR) cross-lagged model were used to analyze the data. “Overall, this study presents consistent support for the existence of both peer selection and peer socialization processes in the prediction of adolescent and peer alcohol use over time” (Curran, et al., 1997, p. 137). The results

imply that peer group intervention programs may be beneficial for Caucasian or Hispanic youth ages ten to eighteen. Regardless of the direction of peer selection and peer influence, the influence of using peers negatively affects the recovering teen.

Schulenberg et al. (1999) conducted a three-wave prospective longitudinal study which followed two cohorts of sixth graders. Data was collected regarding susceptibility to peer influence regarding drug use, perceived exposure to peer alcohol use and misuse, and alcohol overindulgence. Seven models were used to test the data. Results for the cohort as a whole indicated that susceptibility and overindulgence increased across the grade levels. Cohort results also suggest that “susceptibility to peer influence to misbehave is an earlier and more powerful influence on alcohol overindulgence than is perceived exposure to peer alcohol use and misuse” (Schulenberg et al., 1999, p. 109). And susceptibility increases as part of normal development. Individual differences regarding susceptibility will influence the type of selected peer groups and how individuals respond to peer influence. Although this study deals with pretreatment peer influence, these influences may affect post-treatment teens in a similar manner.

Analyzing the effects of exposure to peer and adult drinking on the development of alcohol expectancy from early to middle adolescence, Cumsille, et al. (2000) found from his sample of 3,580 students that exposure to peer drinking is far more important than exposure to adult drinking between grades five and seven. As peer exposure increases, so too does alcohol expectancy. Alcohol expectancies can develop before direct experience with alcohol. If this expectancy toward drinking is reversed and peer exposure is reduced, attitudes and behaviors regarding alcohol may change.

While the previous studies have explored the importance of peer influence, Bauman and Ennett (1994; 1996) suggest that this influence may be overestimated. Using social network analysis, Bauman and Ennett's research indicates that peer selection and projection are stronger variables. Peer selection relates to friendships that are formed because the teen seeks out like-minded friends. Hence, if he or she is using drugs, drug-using friendships will form. Peer influence refers to friendships that form and change the teen's behavior to conform with the group. If the teen was not using drugs and joined a group of drug-using teens, he or she would be influenced by the group's attitude. Either way, friendships could be controlled while the teen is in recovery if the peer groups are also abstaining.

Summary. The previous studies point out the high rate of relapse of adolescents and the importance of peer relationships regarding recovery. Reducing contact with drug-using peers, establishing friendships with those with similar attitudes toward drugs, recognizing the importance of peer relationships, identifying risk factors that might be manipulated during aftercare, and providing a strong and supportive social environment that promotes a drug-free lifestyle may aid the adolescent on his or her road to recovery from addiction.

Recovery-based Schools

Research suggests that providing a supportive social network and reducing contact with drug-using peers may reduce relapse among adolescents. Recovery-based schools provide a safe and sober educational environment for returning students. These schools support the recovery philosophy of AA and provide a supportive social network.

In 1989 Minnesota was the first state in the nation to open two recovery-based schools. As of March, 2004, there were approximately 13 recovery-based secondary schools in Minnesota. These schools fit under the state's umbrella of alternative education programs. These programs have the capacity to enroll approximately 450 students. The Association of Recovery Schools is a professional organization whose mission is to advocate for "programs designed for students committed to achieving success in both education and recovery," and supports the concepts of continuum of care, commitment to abstinence, and working a program of recovery (Association of Recovery Schools, 2006). Each school belonging to this organization is unique but they share a set of principles as outlined by the organization which includes: (1) providing state-recognized academic programs specifically designed for students in recovery, (2) providing academic and recovery services, as well as, post-treatment support, (3) requiring that all students be committed to sobriety and are working a program of recovery while attending school, (4) offering academic courses for high school credit and assisting students while transitioning to another high school, to a career, or to college, and (5) establishing a plan to handle the therapeutic and crisis needs of students (Association of Recovery Schools, 2006; Finch, 2005).

Applying the principles of AA, many recovery-based schools use the book, *The Recovery Book* (Mooney, Eisenberg, & Eisenberg, 1992), which describes the philosophy of AA, recovery, and how these concepts apply to adolescents. Some of these principles include: admitting one has a problem with alcohol; believing that one can change his or her behavior; learning from others when making decisions about one's behavior; taking an inventory of one's life; and discussing past wrongs with a peer,

counselor or significant other (Winters et al., 2000a). Adherence to these principles will help the adolescent to recognize the problems caused by his or her drug use, the need to make life-style changes, and to utilize a supportive community which is there to support those changes.

Summary. By providing a safe and sober environment, recovery-based schools may be an effective alternative educational setting that may reduce relapse among adolescents. Looking more closely at peer relationships within this supportive social network will facilitate our understanding of what is working within recovery schools. In order to understand the influence of peer relationships in mediating the effectiveness of recovery schools, these relationships will be viewed through the framework of social learning theory in order to understand adolescent substance use.

Conclusion

Underage substance use continues to be a major problem for our schools. Surveys monitoring student alcohol use indicate that approximately 80% of high school seniors have consumed alcohol and approximately 8% to 26% used illicit drugs. Only a miniscule number of students needing substance abuse treatment actually receive the treatment and when they do receive treatment, relapse is likely. Research suggests that an aftercare program which involves a supportive social network and distance from drug-using peers might reduce relapse. However, when students return to school, alcohol is readily available, as well as, drug-using friends. Recovery-based schools provide a safe and sober learning environment with supportive social network and peers promoting a drug-free lifestyle. Looking more closely at peer relationships through social learning theories, we may understand the influence of peer relationships in

mediating the effectiveness of recovery schools which will increase the effectiveness of recovery-based schools and provide information for aftercare programming.

Chapter 3: Methods

Well, when I came back from treatment. It was my third time I came back. I stepped into school, and the kid had a bag ready for me. I just, they're always wanting me to come back because I was the kid they got the dope from. I was the kid that wouldn't cut it. I was the kid that wouldn't rip them off. They all want me back in the game so bad, and they know one slip up and I'm right back to where I was.

- "Larry," recovery school student, 2007

The methodological approach used in this study involved comparative case studies of 15 Recovery Schools and 9 ALCs. Interviews and a web-based survey were administered to recovery school (RS) and Area Learning Center (ALC) students in order to compare the influence of peer role models on substance use in each setting.

Participants

Recovery School Students

RS Recruitment. All 15 recovery schools listed in the Association of Recovery School's Directory of high schools in Minnesota were selected to participate in the research study (See Table 1). These schools were located in metropolitan, suburban, small cities, and rural parts of Minnesota. All 358 recovery school students enrolled in these 15 schools were invited to participate in the survey. These students constituted the total population of recovery school students in Minnesota.

School officials at the recovery schools were contacted by letter, phone, and email. After receiving the approval of the program director or superintendent to conduct the study in their district, the researcher met with teachers, counselors, and students and described the study. Parental consent forms, student assent forms, and forms for

Table 1: Participating Minnesota Schools

MN School District	Population	RS	Survey	Interviews	ALC	Survey	Interviews
Burnsville	59,118 suburban	Alliance Academy	16	2	no	none	none
Cambridge	7,613 town	Oak Land Sober School	11	7	no	none	none
Cass Lake	860 rural	Aateshing	7	4	Cass Lake-Bena ALC	11	none
Chaska	23,947 suburban	Solace Academy	17	4	Carver-Scott Ed Coop	9	none
Coon Rapids	61,771 suburban	Arona Academy	15	4	Crossroads ALC	25	5
Detroit Lakes	8,030 rural	Lakes Recovery School	6	8	Detroit Lakes ALC	12	5
ISD #287	61,660 suburban	City West Academy (Eden Prairie)	6	1	Lincoln Hills ALC (Richfield)	10	none
	45,912 suburban	West Campus (Edina)	39	6			
Litchfield	6,594 town	Libre Academy	6	2	no	none	none
Maplewood	36,145 suburban	North Summit Academy	15	4	Harmony ALC	13	4
Minneapolis	377,392 metropolitan	PEASE	16	2	no	none	none
Owatonna	24,719 town	RSSM	7	1	Rose Street Center	11	4
Spring Lake Park	6,565 Suburban	Safe Harbor	4	4	SLP ALC	7	none
St. Paul	277,251 metropolitan	Gateway	8	3	no	none	none
White Bear Lake	23,834 suburban	INSIGHT	8	2	WBL ALC	27	8
Enrollment	TOTAL	358	181	54	794	125	26

students over 18 were distributed. The interview sample of RS students was selected from the survey pool of respondents. The selection criteria were: a.) students had demonstrated a minimum of three months of sobriety, and b.) students had volunteered for the interview. After the signed consent forms were received, survey and interview dates were scheduled.

RS response rate. 181 RS students completed the survey, representing 50.5% of the total population of MN recovery school students. 54 students completed the survey and were invited to participate in interviews. Of this group, 54 agreed to participate, for an interview response rate of 100%.

Characteristics of RS sample. In general, RS high school students had completed a substance abuse program and were committed to sobriety. RS students reported the following: 87% had been in a treatment program, 85% attended recovery support meetings (ex AA/NA), 68% indicated that they were committed to living a drug-free life, and 86% indicated that they had not had alcohol or other drugs in the last 30 days.

Severe addiction and a cycle of treatment and relapse characterized most of these students. Pretreatment use among RS students included: 55% heavy drinkers or users (more than 10 drinks/use per month) and 68% binge drinkers or users (defined as more than 5 drinks at a time). 77% indicated they had relapsed and 19.2% reported relapsing many times. Interview responses indicated that the majority of RS students had attended a variety of high school programs before attending the recovery school. Recovery school students included students who had been court-ordered to attend that particular school, had been on probation, lived in a halfway house, had been recently

released from a treatment center, or had voluntarily sought admission to the recovery school program.

Demographics. In this study, RS students included: 1 transgender (0.56%), 88 males (49%), and 91 females (50%). Fifty-four interviews were conducted with RS students including: 22 males (40.7%) and 32 females (59.2%). Ages of participants ranged from 13 to 20; most were ages 16-18 (85%). They attended grades 9-12; most were in 12th grade (50%). Over a third of RS students (36%) had attended their current school for one year or more. Students attending 3 months or less included 30% RS students (See Table 2). Three RS schools had opened within the year of the study. They included: City West Academy, Libre Academy, and RSSM (re-opened).

Area Learning Center Students

ALC Recruitment There were approximately 350 ALCs in Minnesota in 2007. ALCs serve specific school districts. The ALC located closest to the participating recovery school was invited to participate in the study. For example, INSIGHT recovery school and White Bear Lake ALC are both located in White Bear Lake. Both were included in the study.

ALC school officials were contacted by letter, phone, and email. Nine of the 15 contacted ALCs agreed to participate in the study (See Table 1). After receiving the approval of the program director or superintendent to conduct the study in their district, the researcher met with teachers, counselors, and students at the ALC and described the study. Parental consent forms, student assent forms, and forms for students over 18 were distributed to 794 students. The interview sample of RS students was selected from the survey pool of respondents. The selection criteria were: a.) students had

Table 2

Survey Demographics: Gender

School	Transgender		Male		Female		Total	
	#	%	#	%	#	%	#	%
RS	1	0.56%	88	49%	91	50%	181	59.2%
ALC	0	0.0%	57	46%	68	54%	125	40.8%
TOTAL	1	0.003%	145	47.3%	159	51.9%	306	100.0%

Table 3

Interview Demographics: Gender

School	Male		Female		Total	
	#	%	#	%	#	%
Recovery Schools	22	40.7%	32	59.2%	54	67.5%
ALC	10	38.4%	16	61.5%	26	32.5%
TOTAL	32	40%	48	60.0%	80	100.0%

Table 4

Survey Demographics: Age

Age	ALC		RS		Total	
	#	%	#	%	#	%
no data	1	0.8%	0	0.0%	1	0.3%
13	0	10.4%	1	0.6%	1	0.3%
14	1	11.2%	1	0.6%	2	0.7%
15	9	12.0%	18	9.9%	27	8.8%
16	25	12.8%	54	29.8%	79	25.8%
17	38	13.6%	58	32.0%	96	31.4%
18	46	14.4%	42	23.2%	88	28.8%
19	5	15.2%	6	3.3%	11	3.6%
20	0	0.0%	1	0.6%	1	0.3%
Total	125	40.8%	181	59.1%	306	

Table 5

Survey Demographics: School Grade Level

	School Program					
	ALC		RS		Total	
	#	%	#	%	#	%
no data	2	1.6%	0	0.0%	2	0.7%
8	2	1.6%	0	0.0%	2	0.7%
9	1	0.8%	5	2.8%	6	2.0%
10	17	13.6%	31	17.1%	48	15.7%
11	28	22.4%	55	30.4%	83	27.1%
12	75	60.0%	90	49.7%	165	53.9%
Total	125	40.8%	181	59.2%	306	

Table 6

Survey Demographics: Length of School Enrollment

	RS		ALC		Total	
	#	%	#	%	#	%
< 1 mo	6	3.3%	4	3.2%	10	3.2%
1 to 3 mo	50	27.6%	12	9.6%	62	20.2%
3 to 6 mo	40	22.0%	38	30.4%	78	25.4%
6 mo to 1 yr	21	11.6%	13	10.4%	34	11.1%
1 yr or more	64	35.3%	58	46.4%	122	39.8%
Total	181	59.1%	125	40.8%	306	

demonstrated a minimum of three months of sobriety and b.) students had volunteered for the interview. After the signed consent forms were received, survey and interview dates were scheduled.

ALC Response Rate. 125 ALC students completed the survey, representing 15.7% of the ALC students contacted. 26 students completed the survey and were invited to participate in interviews. Of this group, 26 agreed to participate, for an interview response rate of 100%.

Characteristics of ALC sample. In general, over half of the ALC students had not completed a substance abuse program and most were currently drinking or using drugs. The 2007 Minnesota Student Survey (Minnesota Department of Education, 2009, 2007b) indicated that approximately 80% of ALC students had drunk alcohol or used drugs in the last year and that 22% of these students had been treated for substance use. The ALC participants reported the following: 51% had been in a treatment program, 11% attended recovery support meetings (ex. AA/NA), 30% indicated that they were committed to living a drug-free life, 34% indicated that they had not had alcohol or other drugs in the last 30 days, 20% indicated they were binge drinkers (over 5 drinks at one social event), 50.3% indicated that they had relapsed, and 16.2% indicated that they had relapsed many times. Approximately 50% of ALC students condoned the use of alcohol or other drugs. According to the 2007 Minnesota Student Survey (Minnesota Department of Education 2007b), ALC students drank alcohol before (35% males; 26% females), during school hours (23% males; 16% females), and right after school (45% males; 39% females) suggesting that roughly the same percentage of ALC students in the research sample drank alcohol before and during school hours. The Minnesota

Department of Education (2006) indicated that ALCs included students with a variety of personal issues including: pregnancy, mental health problems, substance abuse, homelessness, chronic truancy, behind substantially academically, physical or sexual abuse, or second language difficulties, suggesting that the research sample of ALC students may also have these same personal issues.

Demographics. In this study, ALC students included: 57 males (49%) and 68 females (54%). Interviews were conducted with 10 males (38.4%) and 16 females (61.5%). Ages of students ranged from 14 to 19; most were 16-18 (87%). ALC students attended grades 8-12; most attended grade 12 (61%). Almost half of ALC respondents (46%) had attended their current school for one year or more. 13% of the students had attended 3 months or less. (See Table 2).

Instrumentation

In order to quantify if peer role models played an important role in the recovery school environment, students were asked specific questions on a 53 item web-based Likert-scale survey related to their school environment and their substance use. For example, Item #44 seeks to find out if students have role models in their school program. It states, "I can think of a student who I look up to or admire at my school." To confirm the findings from the survey and to provide further understanding of the role of peer role models, students were also interviewed. One of the interview questions included: "Do you have a role model? If so describe him or her."

Web-based survey

The website Zoomerang.com was used to create and distribute the survey to individual students and to tabulate the results. Students completed the survey individually on computers, monitored by the researcher.

Survey items. Fifty-three items were included in the survey (See Appendix). The survey included items in the following areas: (1) descriptive information about students in recovery including: school engagement, school and drug use attitudes, and current and past drug use, (2) descriptive information about recovery schools (courses, format, drug use accountability and drug consequences), and (3) descriptive information about the influences on drug use (including the drug itself, community, treatment, family, friends, school, and self) with special focus on role models.

The phrasing of questions related to drug use came from Monitoring the Future (Johnston, et al, 2005), National Household Survey (Substance Abuse and Mental Health Services Administration, 2005), and the Minnesota Student Survey (Luehr, 2005). These survey items included:

- Q#20 *On how many events (such as parties) have you had alcohol, marijuana, or other drugs during the last 30 days?*
- Q #21 *How many times during a social event (such as a party) did you use alcohol, marijuana, or other drug last month?*
- Q #34 *Before starting treatment for substance use, how many events (such as parties) in the last 30 days did you have alcohol, marijuana, or other drugs?*
- Q #35 *Before starting treatment for substance use, how many times during a social event (such as a party) did you use alcohol, marijuana or other drugs in a month?*
- Q #51 *In your opinion, how many times a month do you think this person [role model] would think it was OK to use alcohol, marijuana, or any other drugs last month?*
- Q #52 *In your opinion, how many times during a social event (such as a party) do you think this person would think it was OK to use alcohol, marijuana, or any other drugs last month?*

Interviews

Semi-structured interviews were conducted in order to triangulate survey results and to investigate the role of peer role models with regard to substance use. Specific questions were asked in a particular order and in some cases probing questions were asked. For example, each student was asked if he or she had a role model. If the answer was yes, the student was asked to describe his or her role model and if he or she thought the role model influenced the respondent's substance use.

Interview questions. The interview set of questions included the same broad areas as the survey items. They included: (1) descriptive information about students in recovery, (2) descriptive information about the school program, and (3) descriptive information about influences (including peer role models) on their drug use.

These open-ended questions included:

1. *Describe your school.*
2. *Describe your previous school. Compare your attendance, grades, and classroom engagement at both schools. Future plans?*
3. *Describe friends. Influence your decision to use or not use?*
4. *Do you have any role models at school?*
5. *Relapse? If so, why?*
6. *What keeps you sober today?*
7. *What can schools do to help kids stay sober?*

Procedures

Pilot Study

Two recovery schools, Lakes Recovery School and Oak Land Sober School, and one ALC, Detroit Lakes ALC, piloted the survey and interview questions. Survey respondents included: 16 RS students and 12 ALC students. Interviews were given to

15 RS students and 5 ALC students. During the survey, students were encouraged to ask questions about the survey items they did not understand. After the survey and interviews, students and the program director provided feedback to the researcher about the instruments and procedures used in the study. The researcher also listened to the sound files and evaluated her interview techniques. This feedback was used to eliminate some survey items, rephrase some of the survey items, narrow the number of interview questions, and helped to refine the procedures for administering the survey and interview.

Survey procedures

After consent and assent forms were received, students were randomly assigned a unique identifier number that was used to code each survey, preserving the student's anonymity. Personal information associated with the identifier number was destroyed. Students were informed that their individual information on the survey would be kept confidential and would not be shared with their school, parents, or (if applicable) a probation officer. Aliases were assigned to those students whose responses were cited in this paper (See Appendix B).

Students used computers located at their schools and completed the web-based survey under the researcher's supervision. Instructions were read aloud as students read them on their monitors. Students continued to complete the survey at their own pace.

Researcher observations indicated that RS students had taken the survey more seriously than ALC students. It was observed that RS students spent more time completing the survey. Also, some of the ALC students reported that they had been actively using drugs while taking the survey. Eleven ALC students (9%) indicated that

they had used alcohol, marijuana, or other drugs within the 24 hours before taking the survey. Open-ended responses also indicated current use by ALC students

Security and data files. Individual school website addresses were created to control access to the survey. After the school survey was completed, it was “closed” which meant that no one could access that particular website. For example, White Bear Lake ALC had its own unique website address. When all of the ALC students at White Bear Lake completed the survey, the survey was de-activated and no one except the researcher could access that site. Each student’s survey was downloaded and saved as a pdf file. For example, a White Bear Lake student was given the identifier WBL1001. The survey for WBL1001 was saved as a pdf file. Results for each school program were saved in three formats. These formats included: the set of raw data for all students, an overview report generated by Zoomerang.com and an Excel spreadsheet with the data from all of the students. After the school program files and individual student files were downloaded, the website was deleted. Within two days of the survey’s administration, the participating school and school district were given a report of their school’s survey results.

Figure 1. Example from Zoomerang.com Overview Report



2. Please check one.			
Male		14	52%
Female		13	48%

Figure 2. Example of Excel Spreadsheet

2. Please check one.		
Male	14	52%
Female	13	48%

Interview procedures

After signed consent and assent forms were collected and the web-based survey was completed, each participant was interviewed individually for approximately 20 minutes. Interviews were audio-taped (approximately 26 hours) and transcribed onto 591 single-spaced pages. Student transcripts included the sound file number, school name, and gender of the participant. Notes were also taken by the researcher during the interview using the same identifying information. Participants were told that his or her information would be kept in strict confidence and would not be shared with their parents, their teachers/school staff, or (if applicable) probation officer. Incentives were offered in the form of a five dollar bill which was enclosed in a personalized thank you note.

Analysis

The purpose of the study was to identify the role models in recovery schools, document their behavior, and to investigate the extent to which adolescents in recovery-based schools are influenced by role models. Data from this study were used to address the following research questions. (1) Who are the role models in recovery schools, (2) What behaviors do they exhibit, and (3) To what extent do recovering students emulate those role models?

Quantitative data.

Excel files from Zoomerang.com were exported into SPSS to generate descriptive data.

Qualitative data.

Following the guidelines put forth by Merriam (1998), Patton (2002), Miles & Huberman (1994), and Wolcott (2001), qualitative data from the interview transcripts and open-ended questions on the survey were used to develop categories and underlying themes of responses. Categories were created using the constant comparative method (Glaser & Strauss, 1967). This method involves comparing one set of data (ex. transcript from student NS10017, also known as “Nancy”) with another set of data (ex. transcript from “Linda”), developing a tentative categorization or theme (for example, “RS role models attend support group meetings”), comparing this category or theme to another set of data (ex. transcript from “Sue”), refining the categorization or theme (for example, “RS role models continue to work on their recovery”), and continuing this process of constant comparison and category revision until all of the data have been categorized and themes have been identified that encompass and integrate the salient characteristics identified by the researcher (Merriam, p 191).

Example of qualitative data analysis. In this study, transcripts were typed in column format. The researcher’s prepared interview questions and/or comments were placed in one column and the student’s responses in the other. Chart 1 provides an example involving the transcript from “Nancy” regarding the role model question, “Do you have a role model?”

In order to identify themes among the student’s interview responses, the researcher created a second table. Research questions for the study were placed in columns. Student responses from the transcript were placed under the appropriate column. Themes were identified from the student responses through the constant

 Chart 1: Transcript of Student “Nancy”

Student Identifier	Researcher Questions or Comments	Student’s responses
“Nancy”	Do you have a role model here? Can you tell me about them?	<i>Yes I have two of them. They are seniors, and I look up to them because they’re not right in the middle of all the drama. I can tell that they’re working a really good and strong program. I mean you can tell right when you strike up a conversation with them, that they’re working a program period. They have really strong personalities. Anytime you are looking down or you know you even have good to say, they are always there to hear or vent what they need to say.</i>
	So they listen and they also vent.	<i>It’s always good to have that shoulder to lean on. And they do really good academically too.</i>
	Ok.	<i>Like in a school full of addicts, a lot of us just screw around and we can’t concentrate in school, but these two girls they always get their stuff done. They’re here to get their stuff done, and that’s what I really look up to.</i>
	Do you think having these two role models affects your sobriety?	<i>Yes. Every time I’m in a bad situation or something, I’ll think about them and I’ll think of what they’d be telling me to do or what they would do in the situation.</i>
	So, what they might do?	<i>Yes.</i>

comparative method. Chart 2 provides an example of the data analysis for “Nancy.” These themes were then compared to other student responses and emerging patterns were identified through the constant comparative method (See Chart 3). For example, “Nancy’s” role model behavior themes included: older students in class, working a good program, strong personalities, and there for you when you need them. “Linda’s” role model behavior themes included: funny, goes to meetings, is clean (sober), and good student. Comparing these two students the following themes emerged: (1) role model personalities described, (2) both students described their role model as working on his or her recovery. The themes of these two students were then compared to “Sue” whose role model traits included: laughing, outgoing, lots of friends, 2 years of sobriety, and sober fun. The emerging theme now included: (1) role model personality traits included funny or laughing, (2) role models continued to work on his or her recovery, and (3) role models were sober. As this process continues, more refined and integrated themes emerged. For example, the theme, having long time sobriety, appeared as a role model descriptor for 15 of the 54 RS students interviewed. This theme constituted a category of behavior used to describe RS peer role models.

Measures

The definition of role models, the identification of role models, the behaviors of role models, and the perceived influence of role models are categories used by this researcher to describe the role of peer role models in recovery schools (See Chart 4).

 Chart 2: Example of Qualitative Data Analysis

 Interview Question: Do you have a role model?

 Categories of responses

Student Identifier	Have a role model?	Describes role model.	Influence of RM
"Nancy"	<i>Yes I have two of them.</i>	<i>They are seniors, and I look up to them because they're not right in the middle of all the drama. I can tell that they're working a really good and strong program. I mean you can tell right when you strike up a conversation with them, that they're working a program period. They have really strong personalities. Anytime you are looking down or you know you even have good to say, they are always there to hear or vent what they need to say.</i>	<i>Yes. Every time I'm in a bad situation or something, I'll think about them and I'll think of what they'd be telling me to do or what they would do in the situation.</i>
Themes	- Has role model	- older students in class - working a good program - strong personalities - there for you when you need them	- "what would role model do" may influence decision.

 Chart 3: The Constant Comparative Method

Research Question #2: What behaviors do role models exhibit?

Student Identifier	Student Identifier	Emerging Themes 1	Student Identifier	Emerging Themes 2
"Nancy"	"Linda"		"Sue"	
<i>Strong personalities</i>	<i>He's funny</i>	Type of personality	<i>Laughing all the time</i>	Laughing and funny
<i>There for you when you need them</i>			<i>outgoing</i>	
			<i>Lots of friends</i>	
			<i>So cool</i>	
<i>Working a good program</i>	<i>He goes to meetings all the time</i>	working on recovery		Working on recovery
	<i>He's clean (meaning sober)</i>	?	<i>2 years sobriety</i>	Sobriety
<i>Older students in class</i>		?		?
	<i>He's really good at school</i>	?		?
			<i>Sober fun</i>	?

Chart 4: Data Analysis

Category: Definition of role model			
Measure	Tool	Items	Evaluate
Define positive model	Survey, open-ended	Q #41 <i>Define the term positive role model.</i>	Common themes
Define role model	Survey, open-ended	Q #42 <i>Define the term negative role model.</i>	Common themes
Consensus of definition	Survey	Q #44 <i>I can think of a student who I look up to or admire at my school.</i> Q #47 <i>Do you consider this person [admired person] a role model?</i>	Degree of consensus between these two questions. Stats.
Category: Who is a role model?			
Have a role model?	Interview	<i>Do you have a role model?</i>	Tally and common themes.
	Survey	Q #44 <i>I can think of a student who I look up to or admire at my school.</i>	Tabulate; yes/no
Use of name	Survey	Q #45 Describe that person [admired person]	Tally
	Survey, open-ended	Q #45 <i>Describe that person [admired person]; own words</i>	Common themes
	Interview	<i>Do you have a role model?</i>	Common themes
Relationship	Survey	Q #48 <i>Describe your relationship with this person [admired person].</i>	Tabulate; choices
	Interview	<i>Do you have a role model?</i>	Common themes
Category: Role model behaviors			
Personality Traits	Survey	Q #45 Describe that person (role model)	Tabulate
	Survey, open-ended	Q #45 Describe that person (role model)	Common themes
	Interviews	<i>Do you have a role model?</i>	Common themes
Perceived RM Substance Use	Survey	Q #50 Thinking about that person in school (attitudes toward drug use)	tabulate
	Survey	Q #51 In your opinion, how many times a month do you think this person would think it was OK to drink, use marijuana, or other drugs.	tabulate
	Survey	Q #52 <i>In your opinion, how many times during a social even do you</i>	tabulate

		<i>think this person [admired person] would think it was OK to use.</i>	
	Interview	<i>Do you have a role model?</i>	Common themes
Category: Influence of role model			
Time & Conversations with role model	Survey	Q #49 <i>How much time do you spend with this person.</i>	tabulate
	Survey	Q #50 <i>Thinking about that person in school (conversations)</i>	tabulate
Influence/emulate	Survey	Q #22 <i>If you do not use, which factors below influenced your decision: RM</i>	tabulate
	Survey	Q #22 <i>RM encourages</i>	tabulate
	Survey	Q #23 <i>If you do use, which factors below influenced your decision: RM</i>	tabulate
	Survey	Q #23 <i>RM encourages</i>	tabulate
	Survey	Q #25 <i>How much influence do the following have on keeping you clean and sober? Adult RM</i>	tabulate
	Survey	Q #26 <i>How much influence do the following have on keeping you clean and sober? Peer RM</i>	tabulate
	Survey	Q #43 <i>Who has the most influence over your use?</i>	tabulate
	Survey	Q #53 <i>How much influence do you think this person [admired person] has over your use?</i>	tabulate
	Interview	<i>Do you have a role model?</i>	Common themes

Term role model.

Measures used to ascertain if students share a common understanding of the word, role model, include: defining positive role models and negative models using open-ended questions and comparing the responses to two survey items which asked respondents to think of a student they look up to or admire and then asked them if they considered this person to be a role model.

Who are the role models?

Students were asked to identify role models in their schools. Two measures were used to identify role models. These included (1) the determination of the existence of a role model and (2) the relationship of the role model to the participant.

Existence of role model. In order to determine the existence of a role model, students were asked the following survey item, “I can think of a student who I look up to or admire at my school?” There were two response options: “yes” or “no.” During the interview, students were asked the following question, “Do you have a role model?” The response to this question was either “yes” or “no.”

Relationship of role model. The second measure involved identifying the relationship of the role model to the student. Survey item #48 states, “Describe your relationship with this person [referring to role model].” The student was given the following choices: “boyfriend/girlfriend,” “good friend,” “acquaintance,” “someone I’ve seen at school but he or she doesn’t know who I am,” “I don’t look up to or admire any student at my school.” Responses were tabulated for each type of relationship.

During the interview, students were asked the following question, “Do you have a role model?” If the answer was yes, students were asked to “tell me more about the role model.” Responses to this question often described the relationship of the role model to the participant. The type of relationship was categorized. For example, 8 RS students and 5 ALC responded that their teacher was a role model at their school. Teachers became one of the categories of relationships identified as school role models.

Role model behaviors.

Personality traits, behaviors, and perceived substance use attitudes of the role model were examined to answer the question, what behaviors do role models exhibit?

Personality Traits. Two survey questions and the interview question were used to identify school role model attributes. Question #44 states, “Take a minute or two and think about a student at your school who you admire or look up to. Which words below describe that person?” The responses included: “I don’t look up to or admire any student at my school,” “a leader,” “funny,” “opinionated (holds strong views and beliefs),” “has many friends,” “smart,” “follower,” “rebel (doesn’t care what others think),” “happy,” “loner,” “cares about other people,” “dumb,” “brave (has guts),” “moody,” “looks ‘cool’ or ‘hot,’” and “nice person.” Responses were tallied for both RS and ALC students.

Open-ended questions were also posed. These questions included a survey question and an interview question. The survey question asked the student to type “one or two words that best describes this person [admired person].” The interview question asked the student, “Do you have a role model?” Responses to both questions were listed, categorized and patterns were identified. For example, responses included: “very

caring and dedicated,” “loving and cares about everyone,” and “cares deeply for me” were some of the open-ended survey responses. These responses were grouped under the category, “caring.” Since this “caring” was noted in both ALC and RS responses, “caring” may be seen as an attribute ascribed to peer role models in both of these settings.

Behaviors. To determine which behaviors the role model exhibited, the survey included open-ended questions which asked the student to define positive and negative role models. These definitions often included behaviors describing a particular role model. Responses to the interview question, “Do you have a role model?” were also analyzed.

Responses to both the survey and interview questions were categorized and patterns of responses were noted by the researcher. One example of a category is “working a good program.” Students in recovery often use the phrase, “works a good program.” This term refers to living a life of recovery by going to meetings, having a sponsor, and addressing the 12 Steps used in recovery programs (ex. AA/NA). The following are examples of student responses derived through the constant comparative method that the researcher used to create the category, “working a good program:”

1. “someone who works a good program”
2. “works a good program, goes to meetings, has a sponsor, and has good morals”
3. “attends meetings and works a good program”
4. “someone who is sober, works a good program and acts responsible and lives in a healthy way”
5. “someone who works a program, is honest, and will go to any lengths to grow”
6. “a person who attends meetings ad works a good program and lives a life clean from alcohol or drugs”

This same process for categorizing and identifying patterns was used for interview responses. Examples of RS interview responses categorized as working a good program included: “he goes to meetings all the time,” “you can tell right when you strike up a conversation with them, that they’re working a program period,” and “they’re working a program pretty well.” The responses from the interview and the survey item reinforced the category that RM students perceive that peer role models continue their efforts toward recovery from substance abuse.

Perceived substance use and attitudes. Survey items were used to determine the respondent’s perceived use and attitudes of his or her role model. Those items included:

1. *In your opinion, how many times a month do you think this person would think it was OK to drink, use marijuana, or other drugs (Yes or no response.)*
2. *In your opinion, how many times during a social even do you think this person would think it was OK to use (yes or no response).*
3. *Thinking about that person (role model)... Do you think this person drinks, uses marijuana or other drugs? Do you think this person has drunk alcohol, used marijuana, or has used other drugs last year? Do you think this person has ever drunk alcohol, used marijuana or used other drugs in his or her lifetime (yes or no responses)?*
4. *In your opinion, how many times a month do you think this person [role model] would think it was OK to drink, use marijuana, or use other drugs. Category of responses included: 0, 1 to 2, 3 to 5, 6 to 9, 10-19, 20-30, over 40, I don’t look up to or admire any student at my school.*
5. *In your opinion, how many times during a social event (such as a party) do you think this person would think it was OK to use alcohol, marijuana, or any other drugs “last month?” Responses included: none, 1 to 2, 3 to 5, over 5, other, please specify, and I don’t look up to or admire any student at my school.*

Influence of role models.

Conversations and time spent with role model. Social learning theory suggests that as exposure to a new behavior is increase and positively reinforced, that new

behavior becomes acceptable and desirable to the adolescent (Hawkins, et al., 199, p. 228). Questions related to time spent with the role model and conversations about substance use were included on the survey. This may imply that the more time spent with the role model and the topic of conversation may increase the role model's influence. Survey items used to measure this influence included: (1) "How much time do you spend with this person" [role model] with choices including no time, very little time, often, and all of the time in the following venues: at school, outside of school, on the phone or computer, or during after school-sponsored activities (2) "Does this person [role model] talk to you about alcohol, marijuana, or other drugs," and (3) "Do you talk to this person (role model) about alcohol, marijuana, or other drugs."

Specific influence questions. The survey included 8 items that specifically addressed the respondent's perceived influence of role models. These items included:

1. *If you do not use, which factors below influenced your decision. I look up to a student at my school who does not drink or uses marijuana or other drugs. (checked or not checked).*
2. *If you do not use, which factors below influenced your decision. I look up to a student at my school who encourages me to stay clean and sober. (checked or not checked).*
3. *If you do use, which factors below influenced your decision. I look up to a student at my school who does not drink or uses marijuana or other drugs. (checked or not checked).*
4. *If you do use, which factors below influenced your decision. I look up to a student at my school who encourages me to stay clean and sober. (checked or not checked).*
5. *How much influence do the following have on keeping you clean and sober... adult role models? (no influence, not much influence, some influence, most influence)*
6. *How much influence do the following have on keeping you clean and sober... role models at my school who are my age? (no influence, not much influence, some influence, most influence)*
7. *Who has the most influence over your use... a student at my school who I admire and look up to at school? (no influence, some influence, a great deal of influence, don't know)*

8. *How much influence do you think this person (identified role model) has over your drinking, marijuana use, or the use of other drugs? (no influence, some influence, a great deal of influence)*

Interview responses. Students were asked, “Do you have a role model?” If the response was “yes,” students were asked to “tell me more about your role model.” If the student’s response made no mention of influence, the student was asked, “Do you think your role model affects your decision to use or not to use?” The researcher used the constant comparative method to categorize responses as having either a direct effect or an implied effect. An example of student responses categorized as a direct effect includes: “I believe if I hadn’t had those role models, I would not be sitting here talking with you,” “he has an influence on my sobriety,” and “Yes. Every time I’m in a bad situation or something, I’ll think about them and I’ll think of what they’d be telling me to do or what they would do in the situation.” An example of student’s responses categorized as an implied effect includes: “You see them doing more for the community [recovery school] and you want to be like that.” “I look up to them because hopefully I’ll be able to do that [talking about long time sobriety],” and “... because I see that they’re living a good life and they’re happy, and that’s what I’m going after too.”

In conclusion, data analysis techniques focused on comparisons of the descriptive quantitative and qualitative data from the survey items and interview questions administered to RS and ALC students. The data from the surveys and interviews were used to triangulate student responses in order to provide a better understanding of the influence of role models in recovery schools.

Chapter 4: Results

I believe if I hadn't had those role models, I would not be sitting here talking with you.

- "Ian," recovery school student, 2007

Definition of *Role Model*

The Merriam-Webster definition of a role model is "a person whose behavior in a particular role is imitated by others." This study takes a close look at those people in the participant's life who are looked up to or admired by the student. Parts one and two of the results chapter identify and describe this group of people. Part three describes the extent to which students in recovery are influenced by this group of admired individuals.

Nuanced definition of role model

The survey contains 15 items that pertain specifically to a person who is "looked up to or admired" by the respondent and 4 items that use the term "role model." The interview questions use the term, role model. Student responses from the survey and interview indicated a common agreement with the definition and underlying concept of role model among both RS and ALC students. However, students did not equate the two concepts of role model and admired persons.

Survey. Survey items included: "I can think of a student who I look up to or admire at my school," followed by "Do you consider this person a role model?" The following percentages of students agreed that the classroom student who was "looked up to" or "admired" was also a role model: RS (93%) and ALC (86%). The percentages

of students who disagreed were: RS (6%) and ALC (14%) (See Table 7). Since there is not 100% agreement between the two concepts of admired person and role model, results for the two concepts are reported separately.

Table 7				
Role Model Definition Agreement				
<i>Do you consider this person a role model?</i>				
	RS		ALC	
	#	%	#	%
Yes	160	93.5%	42	85.7%
No	11	6.4%	7	14.2%
Total	171		49	

Interview. The difference between RS and ALC student responses may be due to a difference of attitude toward the term, role model, rather than a difference of definition. During the interview some of the ALC students disagreed with the definition of role model. Some of the responses included:

- 1) "Henry": *There's a couple of people that I could look up to, but I wouldn't consider them a role model.*
- 2) "Robert": *There would be some for me; it's just I really don't look up to people, because I've always been let down, so its like whatever.*
- 3) "Gail": *I could look up to them, and say that's what I want to be or what I want to do, but, not necessarily a role model.*
- 4) "William": *There's a few people that I really like but not to be like role models. I mean all my role models are long dead.*

These results suggest that RS and ALC students are not in 100% agreement regarding the definition of role model. Therefore, results will be reported for both admired persons and role models.

Concept of role model

To determine if students shared a common understanding of role model, students were asked to define positive and negative models through open-ended survey items. These items included:

1. Item #41. *Define the term, positive role model as it related to drinking or marijuana or other drug use.*
2. Item #42. *Define the term, negative role model as it relates to drinking or marijuana or other drug use.*

Positive role model. Both RS and ALC students provided similar examples when defining positive role models. Categories of positive role models included: family members, sober friends, teachers, celebrities, and community members. Some of the ALC student responses included: “my ex-step dad,” “my friend, Stephanie,” “Robin, school teacher,” “MLK,” and “preacher.” Some of the RS student responses included: “grampa,” “homeboy, Nick,” “Ann, teacher,” “da NBA,” and “sponsor.” The interview results indicate that RS and ALC students identified similar categories of people as positive role models.

Themes regarding positive role models from both RS and ALC students include: (1) someone who abstains from drug use, (2) someone who encourages sobriety, (3) someone who is responsible for his or her actions regarding substance use, (4) someone who sets a good example by the way the role model lives his or her life, (5) someone who cares for the respondent, (6) someone who helps others, and (7) someone the

respondent looks up to. Some examples of ALC responses included: “someone who doesn’t drink or do drugs,” “encourages you not to drink,” “someone who is drug free, but maybe has a social drink, but who can control themselves,” “ someone who is setting a good example in their everyday lives by not using drugs or alcohol,” “someone who punishes u for using... because that shows that they care,” “helps people with problems and stuff,” and “someone to look up to for advi[c]e.” Some of the RS examples included: “looking up to someone who does not drink or use drugs,” “someone who encourages you and inspires you to live a clean life without drugs or alcohol,” “someone who is going about life achieving their goals and always doing the right thing,” “someone who helps you in life,” “... cares about people,” and “they support my decision not to use.” These examples indicate that RS and ALC students share a common understanding of the themes underlying the concept of a positive role model.

ALC themes also included: responsible drinking habits, helping you (the respondent) make good decisions, inspiring the student, not disappointing the student, and someone who attends school. For example, one ALC student responded, “someone who parties and does drugs but has their life all worked out and knows when you stop and stuff.” Other RS role model themes included: works a good program of recovery, moderate amount of clean time, shares sobriety story with others, has goals, lives a productive life, and is happy with life. One RS student stated, “my spon[so]r who use[d] to use drugs but has stop[p]ed and found the [Narcotics Anonymous] program and has been sober for 10 years.” These other ALC themes and RS themes used to define positive role models may be the result of different attitudes toward drinking and using

drugs among RS and ALC students. RS students may have include some different descriptors as to what it means to be a positive role model as they, themselves, deal with their own sobriety. However, ALC and RS student descriptions of positive role models appeared to be in general agreement.

Negative models. Both RS and ALC students provided similar responses when defining negative models. Examples of negative models from both RS and ALC students included: using family members, using friends, and celebrities. Some of the ALC responses included: “my mom and dad used to use a lot of drugs and alcohol and it kind of screwed up their lives as well as my brothers and I,” “my friend, Mikey, he do[es] a lot of drugs,” and “Michael Jackson.” RS examples of negative models included: “my mom because she uses and does not support my recovery,” “my using friends,” and “celebrities.” ALC students also included criminals and the homeless as examples of negative models, whereas, RS students included drunk drivers as negative models. These differences may be due to different life experiences with substances use.

ALC and RS students also described similar negative model behaviors. ALC and RS definitions of a negative model included the following behavioral themes: (1) the negative model was a user, (2) the negative model applied pressure on others to use alcohol or other drugs, (3) the negative model had a problem with his or her own drug use, and (4) the negative model did not care for the respondent. Examples of responses from ALC students included: “someone who d[r]opped out of school and all they do is drugs,” “someone who pressures you or does it around you all the time and talk[s] about how cool it is,” “someone that do[es] not know when to stop and don[’]t know how to hand]le] the[m]sel[ves],” and “someone who does it all the time and doesn’t

care if you get hurt from it.” Examples of similar responses by RS students include: “someone who sits on their ass all day and shoots up dope,” “encourage[s] you[r] peers to use and tell them that it doesn’t matter if they use because it’s normal,” “a person who is ignorant to their problem (with drugs or alcohol) when it is hurting them or others,” and “someone who does not care about themselves or others.” These examples indicate a similar definition of a negative model by both ALC and RS students.

Some themes describing negative models did vary among RS and ALC students. ALC students also described someone with legal issues and someone who may be a cheat and liar. For example, ALC responses included: “people who constant[ly] get[s] into trouble with the law and with school,” and “a person that cheats you out of your weed when purchased from them.” RS students included the following negative model behaviors: not being supportive of the respondent’s recovery efforts, being dishonest about his or her own use, someone not working a good program of recovery, and someone who is not honest about their own recovery. Examples of some of these responses included: “someone that doesn’t care to[o] much if you relapse or doesn’t help you when you do,” “someone that goes to AA meetings and claims to be sober, but is really using in secret,” and “not attending meetings or not having a sponsor. Not following the rules; Dishonest.” These differences may indicate a difference in attitude toward drug use. Some of the ALC students are actively using and may view a drug dealer who “cheats” them as a negative model, whereas, a student in recovery who discovers that a student is dishonest about his or her use, may view that person as a negative model.

Summary. Structured and open-ended survey questions appear to indicate that students share a common understanding of the term role model as someone who is looked up to or admired and influences the respondent in a positive manner.

Research Question #1: Who are the role models in recovery schools?

Two measures were used to identify admired individuals and role models. They included: (1) confirming the existence of an admired person and (2) describing the relationship of the admired person and role model to the respondent.

Existence of an admired person

The first step used to identify admired persons in the school programs was to determine if admired persons existed. Responses from the survey item, “I can think of a student who I look up to or admire at my school,” and from the interview question, “Do you have a role model?” were used to determine the existence of admired persons and role models.

Survey. Responses from the survey item, “I can think of a student who I look up to or admire at my school,” indicated that over two-thirds (67.4%) of RS students could think of an admired person as compared to less than half (41.6%) of the ALC students (See Table 8). This result suggests that more admired persons exist in recovery schools than in ALCs.

Interview. To determine the number of role models at recovery schools and ALCs, RS and ALC students were interviewed and asked, “Do you have a role model?” Because of the open-ended nature of the question, the answers included all role models and not just school peer role models. The following percentages of interviewed students indicated that they had a role model: RS 93.4% and ALC 65.2%

Table 8

RS and ALC Peer School Admired Persons

I can think of a student who I look up to or admire at my school.

School Program		no data	yes	no	Total
ALC	Count	3	52	70	125
	% within School Program	2.4%	41.6%	56.0%	100.0%
Recovery School	Count	5	122	54	181
	% within School Program	2.8%	67.4%	29.8%	100.0%
Total	Count	8	174	124	306
	% within School Program	2.6%	56.9%	40.5%	100.0%

(See Table 9). These results suggest that RS students are more likely to have more role models, compared to ALC students.

Table 9

Role Models Identified during Interviews

	Yes		No		Total
Program	#	%	#	%	#
RS	43	93.4%	3	6.5%	46
ALC	15	65.2%	6	26.0%	23
Total	58	84.0%	9	13.0%	69

Relationships with admired persons and role models

Responses from the survey item, “Describe your relationship with this person [identified admired person],” and answers to the interview question, “Do you have a

role model, if yes, tell me more,” were evaluated in order to determine the type of relationship the respondent had with his or her role model. Both ALC and RS students identified school friends and staff members as school role models. An unexpected and special category emerged from the interview data. Some RS and ALC students indicated that they, themselves, were “role models.” This special category of “self” included: (1) students who felt that they had been transformed into school role models because they now exhibited positive behavior (ex. sobriety) that was looked up to and imitated by others in the school, (2) students who felt compelled to become role models and exhibited positive behavior (ex. sobriety) so that this behavior would be imitated by others (ex. daughter), and (3) students who considered themselves role models because they could not identify any other role models in their school and tried to imitate the positive role model behaviors that had been internalized (ex. stay sober).

Survey. The percentages of responses from RS and ALC students describing admired persons as a “good friend” include: RS 74.1% and ALC 78.4% (Table 10). Other percentages of responses describing the admired person relationships included: “boyfriend/girlfriend” (RS 7.5%, ALC 13.7%), “acquaintance” (RS 22.5%, ALC 5.8%), and unknown person (RS 1.6%; ALC 1.9%). More ALC students indicated that their boyfriend/girlfriends were their admired person at school than RS students. This difference between RS and ALC responses may be a reflection of the recovery philosophy at recovery schools. The RS student is encouraged to concentrate on his or her personal issues and to establish a strong peer support group. Only after the student develops a strong sense of self is he or she encouraged to reach out to others. Usually this reaching out is toward family members. Generally intimate relationships are not

encouraged. RS students were also more likely to report an acquaintance as an admired person. The student in recovery may be struggling with his or her own sobriety and admire a student who has been sober for a long time. Although this admired person is looked up to, this person may not be considered a good friend, as yet.

Table 10

Relationship with Role Model

Describe your relationship with this person (identified admired person).

	School Program				Total
	ALC		RS		
	#	%	#	%	
Boyfriend/Girlfriend	7	13.7%	9	7.5%	16
Good Friend	40	78.4%	89	74.1%	129
Acquaintance	3	5.8%	27	22.5%	30
At school, not known me	1	1.9%	2	1.6%	3
Total	51	29.8%	120	16.7%	171

Interview. During the interview, RS and ALC students identified and described role models in the following categories: friend or student at school, staff member (including teachers, counselors, or the program director), and community member. “Self” was again identified as a special category which refers to how the student views his or her own behavior within the school environment (See Table 11).

Table 11: Role Model Relationships Identified during Interviews

	RS		ALC		Total
	#	%	#	%	#
Student/friend at school	30	42.8%	7	20.5%	37
Staff (teachers, counselors, or program directors)	16	22.8%	6	17.6%	22
Family member	6	8.5%	5	14.7%	11
Self (special category)	6	8.5%	5	14.7%	11
Community adult	3	4.2%	1	2.9%	4
Stated: no peer school role model	9	12.8%	10	29.4%	19
Total role models	70	67.3%	34	32.6%	104
Student interviews	46		23		69

“Self,” as a special category. Both RS students and ALC students indicated that they would categorize themselves as role models in their school. This category of role model emerged from the interview data and was not addressed in the survey directly. RS and ALC students provided different perspectives of “self” as a special category which included: evolving into the school role model with the most sobriety, relying on one own self for the positive direction usually provided by the role model, and trying to become a role model for someone else (ex. brother).

A small number of RS students indicated that that they were the role models at their school as he or she (the interviewee) had the most time of being sober and were

one of the oldest students at the school. Former peer role models had either graduated from the school or had relapsed. The interviewee had come to the realization that he or she had the most sober time and had taken the place of former school peer role models. They had now become that role model for other students. One RS student said, “A lot of people would probably say I’m a role model.” RS students also included another example of “self” as a role model category. Several RS students typed, “old self,” as an example of a negative model to the open-ended question, “Define negative role model.” An example of one response stated, “me, in the past; used all the time.”

ALC student described this category of “self” as including two different perspectives. Many ALC students stated that there were no peer role models at their school. Instead of imitating someone else’s positive behavior, which they could not find at school, they turned to themselves to reinforce those positive messages regarding substance use. They relied upon themselves to stay sober and became their own role model. ALC student, “Heath,” provided this response to the question, “Do you have a role model?”

-“A student role model, probably not.”

-“Just because I don’t really depend on other people to look up to because, you know. Even if there was a role model here, they could end up doing drugs too.”

- “In a way, I would consider myself my own role model, because I don’t want to end up where I was before.”

- “And, now I’m doing so much better. I’m going to be graduated early, blah blah blah, you know. Everything’s good with my family. They trust me again. So I’m sort of my own role model in a way.”

The second perspective for ALC students included taking on the role of being a role model for others. Some ALC students indicated that they were working on being a role model for their family members (ex daughter, niece, or brother). For example,

ALC student, “Ashley,” indicated that there were no role models at her school and said, “I want to be a role model to her (referring to her daughter).” This desire to become a role model for others influenced the student’s behavior to such a degree that she actually became the role model in the school who exhibited positive substance use behaviors. As a result of these interviews, “self” was added as a special role model category.

Summary

To answer the question, “Who is a role model,” students were asked to identify their role model. Results from the survey and the interview indicated: (1) more RS students have admired persons and school role models than do ALC students, (2) RS and ALC students included classmates and school staff. The special category of self was described by both RS and ALC students. Different perspectives of self as a special category included: transforming into the school role model because of long time sobriety and age, reliance upon self for positive behavioral messages because a role model could not be identified at the school, and working toward being a role model so that they could be an example of positive behavior for others.

Research Question #2: What behaviors do role models exhibit?

To determine which behaviors role models possess, students were asked to describe their role models. Survey and interview results indicated that living a sober, happy, and successful life were key role model behaviors that were identified by students in recovery.

Perceived Admired Person's Substance Use and Attitudes

Responses from five survey items and one interview question regarding substance use were analyzed in order to describe admired persons found at school. Results indicated that the majority of admired persons of recovery school students were perceived by the respondent to be sober, to have long time sobriety of over a year, to continue to work on their own recovery program, and was living a happy and successful life while sober. ALC students rarely mentioned the substance use of their role models. When they did, the role model was described as sober.

Survey. Survey items used to determine the respondent's perceived admired person's substance use included: (1) "Do you think this person [identified admired person] drinks, uses marijuana, or other drugs?" (2) "Do you think this person [identified admired person] has drunk alcohol, used marijuana, or used other drugs last year?" and (3) "Do you think this person [identified admired person] has ever drunk alcohol, used marijuana or used other drugs in his or her lifetime?" 83% of recovery school students indicated that his or her admired person did not currently drink or use drugs. 64% had not used alcohol or drugs in the last year but 93% of RS students indicated that the admired person had used alcohol, marijuana, or other drugs in the past (Tables 12, 13, and 14). Percentages of responses from ALC students included: admired person did not currently drink or use drugs (54%); admired person had not used alcohol or drugs in the last year (24%), and admired person had used alcohol, marijuana, or other drugs in the past (66%) (see Tables 12, 13, and 14). These results suggest that RS students admire students who are currently sober but have used drugs or alcohol in the past.

Table 12

Current Alcohol and Other Drug Use

Do you think this person drinks, uses marijuana, or other drugs?

	RS		ALC		Total	
	#	%	#	%	#	%
Yes	2	1%	14	28%	16	8.5%
No	114	83%	27	54%	141	75.0%
Don't Know	16	12%	5	10%	21	11.1%
N/A	6	4%	4	8%	10	5.3%
Total	138	73.4%	50	26.5%	188	

Table 13

Alcohol and Other Drug Use: Last Year

Do you think this person has drunk alcohol, used marijuana, or used other drugs last year?

	RS		ALC		Total	
	#	%	#	%	#	%
Yes	33	26%	26	52%	59	33.1%
No	82	64%	12	24%	94	52.8%
Don't Know	5	4%	8	16%	13	7.3%
N/A	8	6%	4	8%	12	6.7%
Total	128	71.9%	50	28.0%	178	

Table 10

Alcohol and Other Drug Use: Lifetime

Do you think this person has ever drunk alcohol, used marijuana or used other drugs in his or her lifetime?

	RS		ALC		Total	
	#	%	#	%	#	%
Yes	118	93%	33	66%	151	85.3%
No	2	2%	9	18%	11	6.2%
Don't Know	4	3%	4	8%	8	4.5%
N/A	3	2%	4	8%	7	3.9%
Total	127	71.7%	50	28.2%	177	

Survey items used to determine the respondent's perceived admired person's attitude toward substance use included: (1) "In your opinion, how many times a month do you think this person (identified role model) would think it was OK to drink, use marijuana, or use other drugs?" and (2) "In your opinion, how many times during a social event (such as a party) do you think this person would think it was OK to use alcohol, marijuana, or any other drugs "last month?" Percentages of responses from RS students include: admired persons did not approve of drinking or the use of drugs (90%) and did not approve of drinking or using drugs of any amount (86%) (See Tables 15 and 16). The percentage of responses from ALC students included: admired person did not approve of any drinking or the use of drugs (32%) but that 40% did think it was "OK" to drink or use one or two times a month. The percentages of responses of ALC students regarding the amount of alcohol approved by his or her admired person

Table 15

Approval of Drug Use

In your opinion, how many times a month do you think this person would think it was OK to drink, use marijuana, or use other drugs?

	RS		ALC		Total	
	#	%	#	%	#	%
0	116	90%	17	32%	133	73.0%
1 to 2	1	1%	21	40%	22	12.0%
3 to 5	0	0%	2	4%	2	1.0%
6 to 9	1	1%	4	8%	5	2.7%
10 to 19	1	1%	1	2%	2	1.0%
20 to 30	1	1%	2	4%	3	1.6%
31 to over 40	4	3%	4	8%	8	4.3%
No Admired Person	5	4%	2	4%	7	3.8%
Total	129	70.8%	53	29.1%	182	

Table 16

Approval of the Amount of Drugs Used

In your opinion, how many times during a social event (such as a party) do you think this person would think it was OK to use alcohol, marijuana, or any other drugs last month?

	RS		ALC		Total	
	#	%	#	%	#	%
None	113	86%	19	36%	132	71.7%
1 to 2	2	2%	16	30%	18	9.7%
3 to 5	1	1%	8	15%	9	4.8%
Over 5	3	2%	5	9%	8	4.3%
Other	3	2%	3	6%	6	3.2%
No Admired Person	9	7%	2	4%	11	5.9%
Total	131	71.1%	53	28.8%	184	

included: “none” (36%), “1 to 2” (30%), “3 to 5” (15%), and “over 5” (9%). These results suggest that the RS students admire students who do not approve of using drugs or drinking alcohol in any amount.

Interview. Interviews with RS students indicated that role models were perceived to be drug-free and did not promote drug use. Themes describing RS role models included: long time sobriety, a shared past of substance use and recovery, continued work on recovery issues, and living a happy and successful life. Some examples of RS student responses describing the importance of a shared past and long sober time include the following:

“Gail”: “(talking about a fellow student) we have similar pasts; Me and Katie were in treatment for six months of our treatment.”

“Nate”: “And there’s other people who have a really long time of sobriety, and I look up to them because it takes a lot to be sober period. So people with like 2 or 3 years, they’ve made it through the hardest part, so its like I look up to them because for me it was a huge struggle because I’ve relapsed a bunch of times...”

“Sue”: “She just got her 2 years, so I really looked up to her when I got here, and now we’re like best friends.”

“Larry”: “I have the most sober time right now at this school.”

“Sam”: “Just like the people that have been sober for a year that are like my age, or like 2 or 3 years. It’s like I don’t know, its good for them. I look up to them because hopefully I’ll be able to do that. I made it 9 months last time and went back, so I got a pretty good shot.”

“Wendy”: “There was a girl here, and she has, I think she has like 2-1/2 years clean, and like I can sit down and talk to her and even though she has that much sobriety, she still goes through the stuff that I’m going through. But she understands like the things I’m going through and she’s still going through stuff, but she can do it sober. So it’s like watching her and she’s my age, and she’s doing this, and she can do it and she’s

working it. It's like ok I can do this, yeah, things can be going wrong, and I can be having a hard time, but I can stick through it, and just seeing her like working her program and being of service, going to meetings early and setting up and helping with coffee. She's just happy."

RS students also described staff role models as having long time sobriety. Two examples include: "Robert" who described a teacher with 5 years of sobriety and "Sandy" whose teacher had 19 years of sobriety.

RS students also described their role models as continuing to work on recovery issues and living a happy and successful life while sober. Phrases such as "working a good program," "puts recovery first," and "goes to meetings all the time" were used to describe the efforts of RS role models to remain sober. Being happy was a key role model personality trait identified by RS students. Many stated that they had not been happy while using and wanted to experience the happiness they saw in their role models. RS students also described role models as being successful at school (ex. receiving good grades), having a job (ex. firefighter), and having repaired family relationships (ex. parents started to trust them again).

ALC. ALC interviewees talked about role models in general terms. Few mentioned drug use. ALC students spent more time describing teachers rather than students. When describing teacher role models, substance use was not mentioned. Being supportive and how students were treated were the main ALC role model descriptors. Some examples include:

"Chris": "A lot of my teachers are role models because they are helping kids a lot more than other teachers from regular schools."

"Carrie": "I mean the teachers are really nice. They aren't just here to teach. They're here to get to know you on a one-to-one basis. I like it."

“Renee”: “It’s not only because they’re older. It’s the way they talk to us. Like they don’t yell at us and tell us, oh, that’s wrong, that’s right. Don’t do that. Don’t do this. They tell us like. They even tell us their personal experiences. “

“Rachel”: “The teachers, I just kind of look up to them because they are the ones that treat you like you’re people instead of just students.”

Summary. RS themes of perceived role model substance use included: long time sobriety, sharing a past history of substance use and recovery with the student, continued work on recovery issues, and living a happy and successful life. Comparisons between RS and ALC student responses were inconclusive since there was only one ALC student who described the substance use of her role model. However the descriptions provided by that one student indicated that her role model was sober, shared a past history of substance use, and continued to work on recovery issues.

Personality traits and behaviors.

Positive adjectives were used by both RS and ALC students to describe their admired persons and role models. RS student role model behavioral themes included: enjoying life, motivated, honest and trustworthy, available and dependable, open and sharing, and respectful. ALC role model behavioral themes included: developing a close personal relationship with the student, being respected, and being successful in life.

Survey. RS and ALC students responded to the following survey item, “Take a minute or two and think about a student at your school who you admire or look up to: which words below describe that person?” Percentages of responses from RS students regarding personality traits of their admired person included: “nice person” (94%),

“cares about other people” (94%), “happy” (91%), “smart” (90%), “funny”(86%), “leader” (86%), “has many friends” (75%), “opinionated” (75%), “brave” (73%). Other percentages of responses regarding personality traits included: “is ‘cool’ or ‘hot,’” (41%), “rebel” (21%), “moody” (13%), “follower” (5%), “loner” (2%), and “dumb” (2%) (See Chart 6 and Table 17).

In general, a similar pattern of adjectives emerged for ALC students. The percentages of responses from ALC students regarding the personality traits of his or her admired person included: “funny” (89%), “happy” (87%), “nice person” (85%), “cares about other people” (81%), “smart” (79%), “opinionated” (70%), “a leader” (66%), and is “brave” (60%). Other percentages of ALC responses included: “looks ‘cool’ or ‘hot’” (47%), “rebel” (30%), “follower”(15%), and “moody” (15%).

Comparing ALC responses to RS responses, a higher percentage of ALC students listed the following traits: “funny” (ALC 89.4%; RS 86%), “looks ‘cool’ or ‘hot’” (ALC 47%; RS 41%), “rebel” (ALC 30%; RS 21%), “follower” (ALC 15%; RS 5%), “moody” (ALC 15%; RS 13%), and “dumb” (ALC 6%; RS 2%). ALC students indicated a lower percentage of their admired persons possessed the following traits as compared to RS responses: “happy” (ALC 87%; RS 91%), “nice person” (ALC 85%; RS 94%), “cares about other people” (ALC 81%; RS 94%), “smart” (ALC 79%; RS 90%), “opinionated” (ALC 70%; RS 75%), “a leader” (ALC 66%; RS 86%), “has many friends” (ALC 62%; RS 75%), and “brave” (ALC 60%; RS 73%).

These results suggest that both RS and ALC admired persons may possess similar personality traits and that those traits may include: “nice person,” “cares about

Chart 6

RS and ALC Personality Traits ranked in terms of frequency of response

RS				ALC			
Rank	#	%	Trait	Rank	#	%	Trait
1	111	94.1%	<i>nice person</i>	1	42	89.4%	<i>funny</i>
	111	94.1%	<i>cares about others</i>				
2	107	90.7%	<i>happy</i>	2	41	87.2%	<i>happy</i>
3	106	89.8%	<i>smart</i>	3	40	85.1%	<i>nice person</i>
4	102	86.4%	<i>funny</i>	4	38	80.9%	<i>cares about other people</i>
5	101	85.6%	<i>leader</i>	5	37	78.7%	<i>smart</i>
6	89	75.4%	<i>has many friends</i>	6	33	70.2%	<i>opinionated (holds strong views and beliefs)</i>
	89	75.4%	<i>opinionated (holds strong views and beliefs)</i>				
7	86	72.9%	<i>brave (has guts)</i>	7	31	66.0%	<i>leader</i>
8	48	40.7%	<i>looks "cool" or "hot"</i>	8	29	61.7%	<i>has many friends</i>
9	25	21.2%	<i>rebel (doesn't care what others think)</i>	9	28	59.6%	<i>brave (has guts)</i>
10	15	12.7%	<i>moody</i>	10	22	46.8%	<i>looks "cool" or "hot"</i>
11	6	5.1%	<i>follower</i>	11	14	29.8%	<i>rebel (doesn't care what others think)</i>
12	3	2.5%	<i>loner</i>	12	7	14.9%	<i>follower</i>
				7	14.8%	<i>moody</i>	
13	2	1.7%	<i>dumb</i>	13	3	6.4%	<i>dumb</i>
				14	1	2.1%	<i>loner</i>
RS n=118				ALC n=47			

Table 17

RS and ALC Personality Traits

Take a minute or two and think about a student at your school who you admire or look up to. Which words below describe that person?

	RS		ALC	
	#	%	#	%
Total respondents addressing item.	118	64.8%	47	38.2%
<i>A leader</i>	101	85.6%	31	66.0%
<i>Funny</i>	102	86.4%	42	89.4%
<i>Opinionated (holds strong views and beliefs)</i>	89	75.4%	33	70.2%
<i>Has many friends</i>	89	75.4%	29	61.7%
<i>Smart</i>	106	89.8%	37	78.7%
<i>Follower</i>	6	5.1%	7	14.9%
<i>Rebel (doesn't care what others think)</i>	25	21.2%	14	29.8%
<i>Happy</i>	107	90.7%	41	87.2%
<i>Loner</i>	3	2.5%	1	2.1%
<i>Cares about other people</i>	111	94.1%	38	80.9%
<i>Dumb</i>	2	1.7%	3	6.4%
<i>Brave (has guts)</i>	86	72.9%	28	59.6%
<i>Moody</i>	15	12.7%	7	14.8%
<i>Looks "cool" or "hot"</i>	48	40.7%	22	46.8%
<i>Nice person</i>	111	94.1%	40	85.1%

others,” “happy,” “smart,” “opinionated,” and “funny.” Other highly rated RS traits of admired persons included: “leader,” “has many friends,” “opinionated,” and “brave.”

Open-ended survey responses Twenty-three RS and 10 ALC students answered the open-ended survey question, “Take a minute or two and think about a student at your school who you admire or look up to. Type one or two words that best describes this person.” RS and ALC students described their admired persons in very positive terms (See Chart 6). Some of the ALC examples included: “kind hearted,” “really smart,” and “good listener.” Some of the RS examples included: “funny,” “loving,” “happy,” “motivated,” and “dedicated.” A low number of RS and ALC students responded to the open-ended survey item. However, all responses positively described the admired person and may suggest that both RS and ALC students perceive their admired person as possessing positive traits.

Interviews. Interview responses from RS and ALC students describing role models included positive adjectives and descriptions of positive behaviors. RS students described both peer role models and staff role models. However, ALC students described staff role models but spoke about peer role models in more general terms. Very few peer role models were identified by ALC students and when they described role models, they often spoke about what they would look for in a role model. Personality RS descriptors formed the following themes: (1) enjoys life, (2) motivated, (3) honest and trustworthy, (4) available and dependable, (5) open and sharing, and (6) respectful. Some of the RS examples from interviews describing role models included:

Chart 6

Responses to Survey Question: "Type one or two words that best describes this person (identified admired person)."

ALC Responses	RS Responses	
<i>Kind hearted, sweet</i>	<i>Girlfriend</i>	<i>Unique and clever</i>
<i>Weirdo and awesome</i>	<i>Funny, bambified</i>	<i>She[']s just a good person al[l] [']round</i>
<i>Cares deeply for me. Always has since kindergar[t]e[n]</i>	<i>Loving</i>	<i>Loving and cares about everyone</i>
<i>Really smart and SOBER</i>	<i>amazing</i>	<i>Commit[t]ed</i>
<i>Themsel[ve]s</i>	<i>Tight</i>	<i>trustworthy</i>
<i>She's raising a son!</i>	<i>Has goals and is doing great ac[a]demically</i>	<i>They wear their heart out on their sleeve</i>
<i>Always got your back</i>	<i>Great</i>	<i>Very caring & dedicated.</i>
<i>Very good athlete</i>	<i>Great</i>	<i>Happy motivated</i>
<i>Good listener</i>	<i>Amazing</i>	<i>strongwilled</i>
<i>Sexy girlfriend</i>	<i>Open, serene</i>	<i>Out going</i>
	<i>He is very understanding</i>	<i>Independent</i>
		<i>Be[a]utiful personality</i>

“Sue”: “She was laughing all the time and having fun sober.”

“Wendy”: “When I was using, I wasn’t happy, and it’s just she has what I want.”

“Paul”: “They’re motivated. They know what their goals are and they’re going for them.”

“Sandy”: “Like they tell you truth, but they’re not like in your face aggressive about it, but they will tell you what needs to be said.”

“Sam”: “Honesty is a really big thing to me.”

“Abby”: “These are kids who everyone at school seems to like and respect.”

“Nicholas”: “Sets the bar for respect.”

“Andrea”: “So I depend on her kind of to talk to me and make me feel better when I’m upset.”

“Sandy”: “She’s there for us like all the time, and it’s not even that she talks to us when we have a problem, but she talks to us when she has a problem too.”

ALC students. Unfortunately not many ALC students identified role models at their schools and when they did, they generally described what a role model would look like or described a staff member. ALC role model themes regarding traits and behaviors included: establishing a personal relationship, showing respect, and being successful.

Examples of ALC interview responses included:

“Carrie”: “I mean the teachers are really nice. They aren’t just here to teach. They’re here to get to know you on a one-to-one basis.”

“Ron”: “And the teachers, I just kind of look up to them because they are the ones that treat you like you’re people instead of just students.”

“Renee”: “And now they’re like in the army. They’re out. They’re in college. They’re doing really good.”

Summary. Personality themes for RS students included: enjoyment of life, motivated, honest and trustworthy, available and dependable, open and sharing, and respectful. Themes describing ALC role models included: establishing a personal relationship, showing respect, and being successful. ALC students identified few peer role models. Most of the ALC descriptions related to staff members or to role models in general. These results may indicate that RS students have experienced more peer role models in their lives than ALC students. However, role model personalities for both RS and ALC appear to be similar.

Summary

Survey and interview data indicate that peer role models and admired persons in recovery schools are perceived to have been sober for a long time (defined as over a year), placed sobriety as a priority in their life, continued to work on recovery issues and also lived a happy and successful life while being sober. Positive role models in recovery schools became the cool, popular kids. According to RS student, W10004, “the most ‘popular’ kids tend to be the kids who work the best programs and have the most clean time.”

Research Question #3: To what extent do recovering students emulate their role models?

Peer role models exist in recovery schools and students ascribe positive traits and behaviors to those role models but do they actually influence the other students in

the classroom? Do students try to emulate those role models? Two measures were used to determine this influence. The first measure evaluated survey items related to the student's time spent with his or her admired person and conversations held with that person. The second measure evaluated 5 specific survey items related to the admired person's influence and the interview's question about role models

Time and conversations with Admired Person

Social learning theory suggests that exposure to positive role models may change behavior. Thus, students in the study were asked on the survey to indicate how much time they spent with his or her admired person. Survey choices included: "no time," "very little time," "often," or "all the time." Students were also asked on the survey where they spent that time with this admired person. Survey choices included: "at school," "outside of school," "on the phone or computer," and "during school related activities after school." The results indicate that RS and ALC students spend approximately the same amount of time with their admired persons (Table 18). School is the place where most of the time is spent with the admired person. RS students spend more time with admired persons during school-related after school activities than ALC students, and ALC students spend more time with their admired persons at outside school activities. School-related after school activities might include football games or community volunteer work. Outside school activities might include church or parties.

Students were asked on the survey to indicate if the student talked to the admired person about drugs and alcohol. There were also asked if the admired person

Table 18
Time Spent with Admired Person

<i>How much time do you spend with this person (admired person)?</i>						
		<i>No time</i>	<i>Very little time</i>	<i>Often</i>	<i>All of the time</i>	Total
<i>At school?</i>	RS	14	29	94	34	171
		8.1%	16.9%	54.9%	19.8%	
	ALC	3	11	20	13	47
		6.3%	23.4%	42.5%	27.6%	
<i>Outside of school (ex. church, parties, job)?</i>	RS	30	63	58	15	166
		18.0%	37.9%	34.9%	9.0%	
	ALC	7	16	14	12	49
		14.2%	32.6%	28.5%	24.4%	
<i>On the phone or computer?</i>	RS	58	64	35	6	163
		35.5%	39.2%	21.4%	3.6%	
	ALC	12	19	8	10	49
		24.4%	38.7%	16.3%	20.4%	
<i>During after school activities (example football)?</i>	RS	51	27	63	17	158
		32.2%	17.0%	39.8%	10.7%	
	ALC	19	12	7	7	45
		42.2%	26.6%	15.5%	15.5%	

talked to them about drugs and alcohol. Results indicate that both RS and ALC students talk about alcohol, marijuana, and other drugs with this person (Table 19).

RS student contact time with admired person. Survey results indicated that 74% of RS students spent most of their time with his or her admired person at school. Only 8% of RS students indicated that they did not spend any time with his or her admired person at school. Percentages of responses indicating other venues where most of the RS student's time was spent with his or her admired person included: "outside of school (ex. church or parties)" (44%), "on the phone or computer (25%)," and "during after school activities (such as football)" (50%) (Table 18).

ALC student contact time with admired person. Responses from ALC students indicated a similar pattern of role model contact time when compared to RS students. 70% of the ALC students indicated that most of the time spent with the admired person was during school. Percentages of ALC responses regarding other venues where contact time might be spent with the admired person included: "outside of school (ex church or parties)" (53%), "on the phone or computer" (37%), and "during after school activities (such as football)" (31%) (Table 18).

Differences. RS and ALC percentages of responses regarding outside school activities and school-related after school activities varied for RS and ALC students. Outside school activities included those activities not sponsored by the school (e.g., parties). Results indicate that ALC students were more likely to spend time with his or her admired person at an outside activity than RS students (ALC 53%; RS 44%). Responses from RS students indicate that RS students spent more time with their admired person at after school activities (ex. football). Percentages of RS and ALC

Table 19

Conversations with Admired Persons

Thinking about that person (admired person) in school, please answer every question.

		<i>yes</i>	<i>no</i>	<i>don't know</i>	Total
	RS	112	48	4	164
<i>Does this person talk to you about alcohol, marijuana, or other drugs?</i>		68.2%	29.2%	2.4%	
	ALC	29	15	2	46
		63.0%	32.6%	4.3%	
	RS	81	35	5	121
<i>Do "you" talk to this person about alcohol, marijuana or other drugs?</i>		66.9%	28.9%	4.1%	
	ALC	26	15	2	43
		60.4%	34.8%	4.6%	

responses of after school activities included: RS 50% and ALC 31%. These results may indicate that RS students are more involved with their school as more RS students indicated more contact with their admired person during after school related activities than ALC students.

RS conversations with admired person. During the time spent with the admired person, did the student and the admired person discuss alcohol, marijuana, or other drugs? Students were asked the following survey questions: (1) “Does this person [identified admired person] talk to you about alcohol, marijuana, or other drugs?” and (2) “Do you talk to this person [identified admired person] about alcohol, marijuana or other drugs?” Percentage of RS responses included: 68% admired person talked about drugs and alcohol to the respondent and 67% of students talked to the admired person about drugs and alcohol (Table 19).

ALC conversation with admired person. The majority of ALC responses to the survey items indicated that conversations by the admired person (63%) and by the respondent (60%) did include topics related to substance use. Percentage of ALC responses include: 63% admired person talked about drugs and alcohol to the respondent and 60% of the ALC students talked to their admired person about drugs and alcohol (See Table 19). The ALC responses and RS responses were similar which may indicate that both groups of students talked to their admired persons about substance use and that their admired persons spoke to them about alcohol, marijuana, and other drugs.

Summary. These results suggest that RS students spend a great deal of time in school, outside of school, and during outside school-related activities with his or her admired person, and that the admired person and respondent talk about substance use

when they converse. ALC students spend most of the time with his or her admired person at school. ALC students more time with the admired person at nonschool related activities than do RS students. Both RS and ALC students talk to their admired persons about drugs and alcohol and the admired person talks to them about drugs and alcohol. Viewing these results through the lens of social learning theory, these results suggest that the time spent with admired persons and conversations about drugs and alcohol may influence the RS and ALC students.

Influence of role model

The participants' perceived influence of admired persons and role models over their substance use was measured using eight survey items and one interview question. Survey items were grouped into four areas: (1) identifying influencing factors from a list of possible influences, (2) indicating the amount of influence of an influencing factor from a list of influences, (3) indicating who has the most influence from a list of influences, and (4) identifying how much influence the admired person from school had on substance use. During the interview students were asked if they had a role model and, if so, "to tell me more" about the role model. The results suggest that the role models and admired persons of RS students have more influence over substance use than do the role models and admired persons of ALC students.

Survey: Identifying influencing factors. Students were given a list of possible influences related to their decision to use or not to use drugs or alcohol. Two of these influences included: (1) "I look up to a student at my school who does not drink or use marijuana or other drugs" and (2) "I look up to a student at my school who encourages me to stay clean and sober." Students were asked to indicate if they currently used

drugs and alcohol. If they answered yes, they were asked to indicate if either of these two influences affected their decision to use or not to use substances. Students were given the same list of influences and were asked to indicate if they did not currently use drugs or alcohol. If the answer was yes, they were asked to indicate if either of these same two influences affected their decision to use or not to use substances.

Non-using RS Students. 172 RS students responded as non-using students to this survey item. Over half of the non-using RS students (52.3%) indicated that they did look up to a student at their school who did not use substances and that this person influenced their decision not to drink or use. 57% of these RS students indicated that a student, who they looked up to at his or her school and encouraged them to stay clean and sober, influenced the respondent's decision to drink or to use drugs (Table 20).

Non-using ALC Students. 71 ALC students responded as non-using students to this survey item. Significantly fewer non-using ALC students indicated that they looked up to a non-using student at their school who influenced the respondent's decision not to use (20%). A similar result was found for non-using ALC student and non-using admired person who encouraged sobriety. 18% of ALC non-using students indicated, that a non-using peer school admired person who encourages sobriety, influenced his or her decision not to use (Table 20).

Using respondents. 35 RS students and 76 ALC students responded as currently using students to this survey. Approximately 6% of the RS students (2 students) and 1% of the ALC students (1 student) indicated that non-using school peer admired persons influenced their decision to drink or to use drugs. A small percentage of using RS and ALC students also indicated that non-using school peer admired persons, who

Table 20

Influences for Non-Using Students

If you do NOT use alcohol, marijuana, or other drugs, which factors below influenced your decision. (Mark all that apply.)

	RS		ALC	
	#	%	#	%
<i>I look up to a student at my school who does NOT drink or uses marijuana or other drugs.</i>	90	52.3%	14	19.7%
<i>I look up to a student at my school who encourages me to stay clean and sober.</i>	98	56.9%	13	18.3%
	N=172		N=71	

Table 21

Influences for Using Students

If you DO use alcohol, marijuana, or other drugs, which factors below influenced your decision. (Mark all that apply.)

	RS		ALC	
	#	%	#	%
<i>I look up to a student at my school who drinks or uses marijuana and other drugs</i>	2	5.7%	1	1.3%
<i>I look up to a student at my school who encourages me to drink or to use marijuana and other drugs</i>	2	5.7%	2	2.6%
	N=35		N=76	

encouraged the respondent to stay clean and sober, influenced their decision to drink or use drugs (RS 6%, ALC 3%) (See Table 21).

Summary. Significantly more non-using RS students identified non-using school peer admired persons as influencing their decision not to drink or use than non-using ALC students. Significantly more non-using RS students also identified non-using school peer admired persons, who encouraged the respondent to stay clean and sober, as having an influence over their decision to use than non-using ALC students. This result suggests that non-using admired persons in recovery schools play an important role affecting the drinking and using behaviors of RS students.

Survey: Amount of influence. Students responded to the following survey item, “How much influence do the following have on keeping you clean and sober?” A long list of influences followed and included: (1) “adult role models who live clean and sober lives,” and (2) “role models at school who are my age.” RS students rated both non-using adult role models and non-using peer role models as having the most influence on their sobriety. Approximately half of the ALC students indicated that non-using adult role models and non-using peers had no influence upon keeping them clean and sober.

Adult role models (Table 22). 172 RS and 120 ALC students rated the amount of influence of adult role models. RS students indicated that adult role models had the following influence: “no influence” (8%), “not much influence” (12%), “some influence” (35%), and “most influence” (44%). ALC students results included: “no influence” (45%), “not much influence” (9%), “some influence” (28%), and “most influence” (18%). These results suggest that the substance use of RS students is influenced by adult role models.

Table 18

Influence of Adult Role Models

How much influence do the following have on keeping you clean and sober?

		<i>No</i>	<i>Not much</i>	<i>Some</i>	<i>Most</i>	Totals
		<i>influence</i>	<i>influence</i>	<i>influence</i>	<i>influence</i>	
<i>25. Adult role models who live clean and sober lives</i>	RS	14	21	61	76	172
		8%	12%	35%	44%	
	ALC	54	11	34	21	120
		45%	9%	28%	18%	

School peer role models. 174 RS students and 115 ALC students rated the influence of school peer role model on their sobriety. The responses of RS students included: “no influence” (15%), “not much influence” (20%), “some influence” (32%), and “most influence” (33%). Responses from ALC students included: “no influence” (50%), “not much influence” (19%), “some influence” (22%), and “most influence” (10%). Results suggest that school peer role models may have more influence for RS students than ALC students (Table 23).

Survey: Most influence. RS and ALC Students responded to the following survey item, “Who has the most influence over your alcohol, marijuana, and other drug use?” A long list of influences followed and included: “a student at my school who I admire and look up to at school.” Percentages of responses from 140 RS students included: “no influence” (44%), “some influence” (17%), a “great deal of influence” (34%), and “don’t know” (6%). Percentages of responses from 121 ALC students

Table 23

School Peer Role Models

How much influence do the following have on keeping you clean and sober?

		<i>No</i>	<i>Not much</i>	<i>Some</i>	<i>Most</i>	<i>Totals</i>
		<i>influence</i>	<i>influence</i>	<i>influence</i>	<i>influence</i>	
26. Role models at	RS	26	34	56	58	174
		15%	20%	32%	33%	
school who are my	ALC	57	22	25	11	115
		50%	19%	22%	10%	
age						

included: “no influence” (71%), “some influence” (15%), “a great deal of influence” (9%), and “don’t know” (5%). These results suggest that school peer admired persons may be important to RS students but do not appear to influence ALC students (Table 24).

Table 24

Most Influence over Substance Use

Who has the most influence over your alcohol, marijuana, and other drug use?

		<i>No</i>	<i>Some</i>	<i>A great</i>	<i>Don't know.</i>	<i>Totals</i>
		<i>influence</i>	<i>influence</i>	<i>deal of</i>		
				<i>influence</i>		
A student at my	RS	61	24	47	8	140
		44%	17%	34%	6%	
school who I admire	ALC	86	18	11	6	121
		71%	15%	9%	5%	
and look up to at						
school.						

Other influences. Other influences listed under this survey item included: “school friends,” “non-school friends,” “parents,” “brothers and sisters,” “teacher and other adults at my school,” “my AA/NA sponsor,” “my support groups like AA or NA,” “my church or religious beliefs,” and “other adults in the community.” RS students indicated that the following influences had the greatest influence over their substance use: “parents” (42%), “teachers” (42%), “sponsors” (41%), “support groups” (39%), “friends attending my school” (37%), and “a student at my school who I admire and look up to at school” (34%). The lowest rated influence was “my church or religious beliefs” (19%). These results suggest that although a peer school admired persons may have influence upon students in recovery, other influences such as parents, teachers, sponsors, and a recovery support group may have more influence.

Survey: Admired person’s influence. After respondents had identified a student at their school that they admired or looked up to, they were asked a series of questions related to that identified student. One question asked was “How much influence do you think this person has over your drinking, marijuana use, or the use of other drugs?” Responses included: “no influence,” “some influence,” “or a great deal of influence.” 124 RS students responded to this item and 78% of those students indicated that his or her admired person had some or a great deal of influence over their substance use. Of the 23 ALC students who responded to this item, 65% indicated that their admired person had some or a great deal of influence over their substance use (Table 25).

Interviews. To further understand the part peer role models play in the substance use decisions, students were asked if they had role models and, if so, to talk about those role models. A total of 23 students discussed the influence of their role

Table 25

Influence of Admired Students

How much influence do you think this person (identified admired person) has over your drinking, marijuana use, or the use of other drugs?

	RS		ALCs	
	#	%	#	%
<i>No influence.</i>	27	21.8%	8	34.8%
<i>Some influence.</i>	63	50.8%	8	34.8%
<i>A great deal of influence.</i>	34	27.4%	7	30.4%
TOTAL	124		23	

models on their decision to drink alcohol or use other drugs. The majority of students made statements indicating that they felt their role models had a positive influence upon their drug use (See Table 26 and Chart 7).

RS Students. Students enthusiastically talked about their school role models. RS statements regarding the positive influence of role models included: statements of fact, statements of encouragement to change, and statements illustrating how the role model actually influences the student's substance use behavior. Some RS student examples of statements of declaring a direct influence of the role model upon the participant's behavior included:

“Andrew”: *He as an influence on my sobriety.*

“Emma”: *We (leaders and role models in the school), you know just, we really, a lot of times keep each other in check.*

Table 26

Interviews: Role Model Influence

Number of Students Indicating Role Model Influence over Drug Use						
	RS		ALC		Total	
	# Students	%	# Students	%	# Students	%
Positive Influence Statement	17	94.4%	4	80.0%	21	91.3%
No Influence Statement	1	5.5%	*1	20.0%	2	8.6%
Total	18	78.2%	5	21.7%	23	

* Student indicated that if he had a role model, the role model would not have any influence over his substance use

Chart 7

Interview: Role Model Influence

To What Extent Do Recovering Students Emulate Those Role Models?

1. *He has an influence on my sobriety.*
2. *We (leaders and role models in the school), you know just, we really, a lot of times keep each other in check.”*
3. *I believe if I hadn't had those role models, I would not be sitting here talking with you.*
4. *Like if he can do it; I can do it.*
5. (After describing his role model's life)
That's what I want.
6. (After describing his experiences with his role model)
I try to do that everyday I come here...
7. *I don't think I ever would have gotten to where I am today if that kid wouldn't have been here.*
8. *Oh, yeah, I really do think so because I mean I hold his opinion very strongly, and if he tells me something, I'm gonna hold it to that.*
9. *Um. In a sense it does, because if I can see someone else achieving this, and you growing stronger and stuff and changing, then it gives me a sort of encouragement knowing that I could. I mean overall it comes down to me, what I do, in staying clean and sober.*
10. *Yes. Every time I'm in a bad situation or something, I'll think about them and I'll think of what they'd be telling me to do or what they would do in the situation.*
11. *Oh, yeah. Like she's there, I can continue like her.*
12. *Yeah. I think because we are such good friends now that if either one of us used it would really like hurt the other person a lot.*
13. (talking about long time sobriety)
I look up to them because hopefully I'll be able to do that.
14. *You see them doing more for the community, and you want to be like that.*
15. (after describing her role model)
When I was using I wasn't happy, and its just she has what I want.

16. *Yes. I do, because I feel like those people have traits that you desire, something that you can work towards. So it's something that I can work toward, and maybe some day I can have more of those attributes.*

17. *...because I see that they're living a good life and they're happy, and that's what I'm going after too.*

*18. *He made it through, and it's kinda showed me that even though you did go to ALC, you can still, I mean you can make it out.*

*19. (describing the students in her school)
So I guess they're a role model of what I don't want to be.

*20. *Because I want to be a role model to her (her daughter). I don't want her to do some of the mistakes I've made.*

*21. *And if he slips up once he thinks of me, and if I even think about slipping up once, I think of him. So we just don't do it.*

* indicates ALC student response

“Ian”: *I believe if I hadn't had those role models, I would not be sitting here talking with you.*

“Larry”: *I don't think I ever would have gotten to where I am today if that kid wouldn't have been here.*

Some statements from RS students indicating a feeling of encouragement to change alcohol and drug use due to their role model's influence included:

“Sue”: *Yeah. I think because we are such good friends now that if either one of us used it would really like hurt the other person a lot.*

“Annie”: *Yes. I do, because I feel like those people have traits that you desire, something that you can work towards. So it's something that I can work toward, and maybe some day I can have more of those attributes.*

“Nicole”: *In a sense it does, because if I can see someone else achieving this, and you growing stronger and stuff and changing, then it gives me a sort of encouragement knowing that I could. I mean overall it comes down to me what I do, in staying clean and sober.*

“Larry”: *Like if he can do it; I can do it.*

“Sam”: (talking about sobriety) *I look up to them because hopefully I'll be able to do that.*

“Wendy”: (after describing her role model) *When I was using I wasn't happy, and it's just she has what I want.*

Some students described actual situations when their role model influenced their substance use decision. Two examples follow:

“Nancy”: (referring to role models) *Yes. Every time I'm in a bad situation or something, I'll think about them and I'll think of what they'd be telling me to do or what they would do in the situation.*

“Larry”: (after describing his experiences with his role model while talking about substance use) *I try to do that everyday I come here...*

As RS students described their role models, it became clear that they felt that their role model had influenced their substance use decisions and that they wanted to be like the role model and many had made actual changes in their lives. These responses suggest that role models do positively influence the substance use of students at recovery schools.

ALC Students. A small number of role models were identified by ALC students during the interviews and only five students discussed the possible influence of their role models. Four responses indicated a positive influence upon the participant. These responses included :

“Aaron”: *He made it through, and it’s kinda showed me that even though you did go to ALC, you can still, I mean you can make it out.*

“Barbara”:. (describing the using behavior of students at her ALC)
So I guess they’re a role model of what I don’t want to be.

“Ashley”: *Because I want to be a role model to her (her daughter). I don’t want her to do some of the mistakes I’ve made.*

“Claire”: *And if he slips up once he thinks of me, and if I even think about slipping up once, I think of him. So we just don’t do it.*

One ALC student, “Walter,” indicated that if he had a role model (and he had gone into quite a bit of detail as to why he didn’t have one), that role model would not have any influence over his substance use. The results from ALC students may indicate that if the majority of students had role models, these role models may positively affect their behavior.

Summary. Survey results indicate that RM students spend most of their school time with their role models, talk about substance use with role models, and over half

feel that role models may have some or a great deal of influence over their decisions to use or not to use. When describing a particular admired person, 72% of RS students indicated that that his or her admired person had some to a great deal of influence over his or her substance use. Interview responses indicated that role models may have a direct influence, may encourage behavioral change, and may actually change the behavior of RS students. The survey results and interview responses indicate that role models and admired persons may influence the RS student.

Summary of results

The analysis of the survey and interview results addressed the following broad areas for students in recovery: (A) defining role models, (B) identifying role models and admired persons in the classroom, (C) describing role models, and (D) investigating the influence of role models and admired persons for students in recovery.

How is the concept of a 'role model' defined by students in recovery? Both RS and ALC students agreed upon the definition and concept of a *role model*. Originally, a role model had been defined in the study as a student who was “looked up to or admired.” This term was used for some of the items on the survey. However, the definition of an admired student did not correspond exactly with the students’ definition of a role model and therefore results have been reported separately for each term.

RS students and ALC students agreed upon the definition of positive models. A positive role model was described as a person who is drug-free, encourages sobriety, is responsible for his or her actions regarding substance use, sets a good example by the way the role model lives his or her life, cares for the student, helps others, and is looked up to by the student. A negative model was described as a person who uses alcohol or

other drugs, applies pressure on others to also use, has a problem with his or her own use of alcohol or other drugs, and doesn't care about the student. Structured and open-ended survey questions appear to indicate that students share a common understanding of the term role model as someone who is looked up to or admired and influences the respondent in a positive manner

Who are the role models in recovery schools? Both RS and ALC students identified role models and admired persons in their classrooms. However, RS students appear to have more role models and admired persons than ALC students. RS and ALC students identified classmates and school staff as school role models. A special category of "self" was also identified and included students who believed that they had taken on the characteristics of role models at their schools. Responses from recovery school students indicate that students who were "looked up" to or "admired" at recovery schools were categorized as "good friends" rather than as "boyfriend/girlfriend," "acquaintance," or someone unknown to the student.

What behaviors do role models in recovery schools exhibit? Students in the classroom who were admired or "looked up to" and students identified as school role models were described as living a drug-free life. They were perceived by the student in recovery to have been sober for a year or more but they also had a past history of severe addiction similar to other students attending the recovery school. Respondents perceived that the admired person in the classroom and the role model continued to work a program of recovery and lived happy and successful lives. Both were described in positive terms by the student in recovery which included the following personality traits: "funny," "happy," "smart," "nice person," "cares about other people,"

“opinionated,” “a leader,” and “brave.” Using the constant comparative method, the researcher identified the following descriptors used by RS students to describe their role models: enjoys life, motivated, honest and trustworthy, available and dependable, open and sharing, and respectful.

To what extent do role models influence the behavior of students in recovery?

Students and role models who do not drink or use drugs appear to be an important influence upon the substance use behaviors of recovery school students. Two measures were used to determine the extent of the influence of role models. First, the amount of time and conversations held among students are thought to influence behavior. 67% of students at recovery schools had identified a peer at their school who they “looked up to” or “admired.” These students were described as being sober and encouraging a sober lifestyle. Results from this study indicate that recovery school students spend most of the time with this identified student at their school and that both students discussed the use of alcohol and other drugs with one another. This result may indicate that students struggling with substance abuse issues may be positively influenced by the presence of non-using peers in their school.

Responses from survey items and interview questions indicate that role models and persons admired in the classroom may be an important influence for RS students. During the interviews, many students stated that they felt that their role models at school directly influenced their behavior. Students were encouraged or empowered by the role model’s presence and described actual situations when the role model had helped them to abstain from drug use.

Chapter 5: Discussion

I thought that there's no such thing as people that really want to be sober. Like I thought I was gonna come in here and everybody was gonna be just here because they had to be and you know I was surprised because people are here because they want to be. They're serious about it. It's the best place to be if that's what you're trying to do.

- "Nichole," recovery school student, 2007

This study identified role models and admired persons in recovery schools, described their behavior, and investigated the extent to which students in recovery-based schools are influenced by role models, with the purpose of formulating recommendations for school administrators. As discussed in Chapter 2, social learning theories suggest that behaviors are reinforced by attitudes, norms, and behaviors of perceived significantly important social groups; that identification with this social group will encourage the imitation of those behaviors; and that a social attachment or bond will be created which will continue to influence that behavior. Results from previous research indicate that nondrug-using role models may prevent relapse and consequently influence academic performance for the student returning from substance abuse treatment. This study found that at recovery schools, students with over a year of sobriety made up that "significantly important social group" and students new to recovery identified with these sober role models. Students at recovery schools were encouraged by their role models to remain sober and these relationships influenced the students' self-reported drinking and drug-using behaviors.

Sober students and recovery schools

In today's schools most high school students have tried alcohol, marijuana, or other drugs. Finding a school environment where there is little or no substance use is unusual. As sober school student, "Nicole," stated, "I thought that there's no such thing as people that really want to be sober." However, results from this study indicate that 89% of students attending recovery schools reported that they had been sober for over a month and 27% had been sober for over a year. Self-reported recovery school sobriety rates are significantly higher than the comparable rates for ALC students. ALC students reported that 38% had been sober for over a month and 9% had been sober for over a year. Students returning from substance abuse treatment are advised to refrain from using alcohol and other drugs and to stay away from people who continue to drink and use drugs. Therefore a sober school environment provides an educational setting conducive for students returning from substance abuse treatment.

Studies suggest that relapse may be prevented by reducing contact with drug-using peers and by providing a supportive social network (Brown et al., 1989; Catalano & Hawkins, 1985; DeJong & Henrich, 1980; Shoemaker & Sherry, 1991; Latimer, Winters, Stinchfield, & Traver, 2000; Vaillant, 1988). The peer cluster theory emphasizes the importance of attaching one's self to a particular group and associating with that group. Swaim (1998) suggests that attachment to non-deviant peers would lead to non-deviant behaviors. Recovery schools may represent such a non-deviant peer cluster which promotes sobriety. Not only is the recovery school environment conducive for the student's struggle with sobriety but it is also an important school

choice for students returning from treatment as it would provide a safe, sober, and supportive environment for the student.

Sober role models and their influence

This study found that 93% of recovery school students had sober school role models which included school peers and staff members. During the interviews, the majority of RS students described peer role models as having been sober for over a year and who had promoted a drug-free lifestyle. Whereas, the majority of ALC students indicated that they did not have a school role model. Recovery students also indicated that sober role models had an influence over their decision to use or not to use alcohol or other drugs.

The high percentage of positive role models and their influence on recovery school students suggests that role models may be an important component of a supportive school environment. Bandura (1986) described peer relationships as involving attention, retention, reproduction, motivation, and self-regulation of underlying group norms and values. The relationships between the recovery school role models and other students in the classroom helped to create an environment where sobriety was valued and asking for help was supported.

Those relationships were nurtured at recovery schools in several ways. Sober role models acquired leadership status in the classroom and drew the attention of new students. Sober behavior was reproduced by students as these role models were “looked up to” and abstinence was “emulated” by other students. Students wanted the happiness and success that these role models had in their lives. Sober school role models were the “cool” kids at school. Sober fun and a drug-free lifestyle became the norms at the

school environment. Finally, some students described how peer role models helped them to “self-regulate” their drinking and drug-using behaviors. Some students related incidents when they were in a difficult situation (ex. watching a football game when people began drinking) and they asked themselves, “What would so and so (role model) do in this situation.” Support from role models was viewed positively and not as one ALC student described as a “crutch.” Role models were seen as supportive. One recovery school peer role model characteristic was dependability, being there for students when they needed help. Students described having phone lists of students they could call any time or any place for support. More research is needed to understand the important part sober role models play as they help to create stronger and more supportive school communities for recovering students.

Transforming into role models

Although the findings from this study confirm the previous research that emphasizes the importance of positive role models, it also suggests that role models may be created within the school environment. Interviews with several students revealed that the students, themselves, felt that they had become the role model in their schools. They realized that they had the most sober time at their schools and reported that others looked up to them because of their sobriety. How did this happen? One explanation may be found in recovery school practices. Most recovery schools have a group time every day (and in some cases once a week). During this time students share their sober days with the entire school and issues related to the school community are discussed. 77% of RS students indicated that their school kept track of their sober days and 60% of the students indicated that support group meetings (such as AA or NA)

meetings were also tracked. 74% of the students indicated that the school community would meet to discuss consequences for drug use at the school. Recovery students are held accountable for their behavior but they are also recognized for their accomplishments. Sober days and meetings are highly valued by the staff and other students at the school. This positive reinforcement and public recognition by the school community may suggest a process for the transformation of recovering students into sober role models.

Sober role models and self-empowerment

Recovery school students in the study described role models as leaders in their schools, brave and opinionated. They were happy with their lives and reached out to others rather than focusing on their own problems. These behaviors suggest a strong sense of self-worth and positive self-esteem which may reinforce the student's inner strength when dealing with substance issues outside of the recovery school environment.

Changing self-esteem. Adolescents undergoing treatment for substance use may experience low self-esteem as they begin to experience emotions once again. These emotions can include a strong sense of guilt and shame related to the consequences of their drinking or drug use and these emotions may lead to low self-esteem. Stealing from a mother's purse, trading sexual favors for drugs, attempting to kill a loved one, living on railroad tracks, and attempting suicide were examples of some of these consequences recovery students shared during interviews. Recognizing how their behavior has affected others and making changes in one's life are part of the continuing process of recovery. Students at recovery schools often work out these issues during

“group” or seek out support from others, including sober peer role models, at their school. This interaction may contribute to self-esteem changes. More research is needed to understand if these changes in self-esteem act as protection for the student when they leave the recovery school environment.

Recovery School Recommendations

The supportive environment of recovery schools includes: clear consequences for alcohol or other drug use, the absence of alcohol or other drugs on the premises, and the establishment of a school community that publicly rewards and reinforces abstinence. Strengthening the bonds between sober role models and struggling students will help to build that school community. Some recommendations for focusing on peer role models for recovery schools include: (1) establishing mentoring programs for struggling students at the recovery school, (2) including sober role models as part of a program evaluation tool to determine the “health” of the school community, and (3) considering the ratio of sober role models to struggling students when creating new recovery schools.

Mentoring programs. Strategies taken from mentoring programs may help to strengthen established recovery school communities. Although most mentoring programs are designed as cross-age peer programs, using mentoring principles with recently sober students and long-time sober role models may be as successful. The Office of Safe and Drug-free Schools at the U.S. Department of Education has printed guidelines in “Building Effective Peer Mentoring Programs in Schools: An Introductory Guide” (2008). Many recovery school role models are in leadership positions and help to form the glue that holds together the supportive environment in recovery schools. A

more formalized mentoring program may be seen as an extension of these supportive efforts.

Healthy school community. The current study indicates that the existence of sober peer role models is an important influence for the student in recovery. Although this study did not evaluate school program success, the important role of sober peer role models suggests that these role models might be an important factor in such a formal evaluation. The current study classified dysfunctional school communities as having a high proportion of recently-sober students (ex. one month or less) compared to the proportion of long-time sober students (ex. one year or more of sobriety). In one case, a recovery school was closed and all of the students were removed from the program. The school community had been declared “toxic.” The school reopened with a new group of students. In another school, the majority of students were displaced and the long-time sober students remained. Gradually new students were added to the program. What is unknown is the number of long-time sober students needed to create or maintain a healthy recovery school community. Further research is needed to determine the critical mass of students needed for successful recovery schools.

Creating new programs. As schools continue to address the needs of students returning from substance treatment, new school programs and supportive services are being created. When creating new recovery schools, administrators may benefit from understanding how many role models are needed to set the groundwork for a successful school environment and seek out long-time sober students when enrolling students. Innovative recovery programs, such as e-recovery and computer social networking groups, may benefit from setting particular role model recruitment goals. Phone trees

and peer support groups may also find the concept of a critical mass of role models to be a contributing factor to the success of those initiatives. Research is needed to explore the influence of peer role models and the success of new recovery programs and supportive services.

Traditional Schools Recommendations

Traditional schools are often the setting where students with substance abuse issues experience behavioral and academic problems. These students often leave their home schools for treatment and return to their designated home schools. Findings from this study suggest that the influence of sober role models be taken into considerations regarding placement decisions of students returning from substance abuse treatment and the supportive services given to students currently attending traditional schools with substance use issues.

Placement decisions. Consequences for substance use at traditional schools often include: suspension, expulsion, or a recommendation for treatment. Students returning from treatment face special challenges as they return to their home schools. Drugs may still be available at their school. Drug dealers and old using friends are waiting for the returning students. Familiar triggers, such as the bathroom stash or connections in the parking lot, are still present for the student. School administrators seeking to meet the needs of the student recovering from substance abuse may use the results of this study to inform their decisions regarding the appropriate placement for the returning student. Administrators may recommend any of the following Minnesota school placement options for the returning student: the home school (traditional school setting), an alternative education program, homeschooling, a recovery-based school,

online learning, Postsecondary Enrollment Options program, a charter school, or a public school (traditional setting) outside of their school district under the Open Enrollment policy. The results of this study indicate that the availability of a supportive network including sober role models influences the success of the returning recovering student and would play an important role in the placement decision.

Current students. This study involved recovery school students and area learning center students and therefore cannot be generalized to the traditional school setting. However, school administrators aware of the importance of sober peer role models may incorporate programs such as mentoring or a supportive peer network as key factors when establishing alternative programs such as a school-within-a-school program or supportive services through their counseling departments. Future research is needed to determine if sober role models would have the same influence in the traditional school setting as in the recovery school setting.

Limitations of findings

Results cannot be generalized to all ALC programs and recovery school results cannot be generalized to ALC programs. Students recovering from substance abuse are the primary focus of this study. The results are not intended as recommendations to prevent substance use.

ALCs or traditional schools. The findings of this study cannot be generalized to all students attending Area Learning Centers. One result from this study suggests that ALC students have fewer role models than recovery school students. The sample of ALC students in this study represents a very small percent of the total population of ALC students in Minnesota. During the 2006-2007 school year, there were 240 ALC

programs that served 11,414 students. The participants in this study included 125 ALC survey respondents and 26 interviewees from 9 ALCs. The survey respondents represent 15.7% of the student population from the participating ALC schools. Because of the small sample of ALC students, the findings of this study cannot be generalized to all ALCs in Minnesota. This study may suggest that ALC students have fewer role models in their schools but further research is needed to determine the existence, behaviors, and influence of role models for ALC students.

There may be a hidden bias among this small sample of ALC students. For example, ALCs were selected because they were geographically close to the recovery school and were located in the same school district. Perhaps more sober students elected to attend the recovery school rather than the ALC, leaving a larger number of using students at the ALC. The possible hidden bias of the ALC sample also limits the results of the study.

Not only is the sample size of ALC students small but the composition of the population of students is very different. Recovery students are committed to sobriety. They work every day to maintain that sobriety. ALC students may or may not share that same attitude toward alcohol and other drugs. The substance use attitudes of ALC students may include: sobriety, responsible drinking habits, problem drinking and drug use, and addiction.

Besides a difference of substance use attitude, ALC students attend alternative educational settings for a variety of reasons. For example one student told me she didn't drink because she was pregnant. She was attending the ALC until she had her baby. Another ALC student told me he didn't drink because he was Moslem and it was

against his religion. He was attending the ALC because of language difficulties. Some of the other differences between the recovery schools and ALCs include school size, instructional techniques (i.e. packets versus lecture), location, and emphasis of programming. These differences make it difficult to apply the findings of recovery school students to ALC students. Role models are valued at recovery schools. This study indicates that for this sample of ALC students, few peer role models were found at ALCs. To recommend a mentoring program based on the findings of this study for ALC students would not be appropriate.

Continuum of care model. Recovery schools are often seen as part of a continuum of care for the ongoing treatment of substance use. The goal of recovery schools is to provide a safe, sober and supportive school environment. The school is looked upon as a community by the students and staff and they work toward keeping the school community sober and healthy. The findings from this study relate to those students who have completed treatment, are committed to sobriety, and attend recovery-based schools.

For example, sober role models may influence students attending recovery schools to stay sober but these results cannot be generalized to traditional schools. . ALCs or traditional schools that may not have the same accepted social norms as recovery schools. Sober peer role models may not be the “cool” students at traditional high schools and therefore would not be as likely to influence others to stay sober.

Drug-free school zones. Traditional schools often focus their attention on preventing substance use. The findings of this study are limited to students in recovery and do not address the issues of substance abuse prevention. Recovery schools are not

intended for all students seeking a sober school environment. They are intended for students recovering from substance use. One of the main characteristics of the recovery school peer role model was a shared history of drug use. Students connected with one another because both students understood what the other had gone through during their struggles with drugs. This “connection” would not exist between students in recovery and students without this shared past drug experience. Therefore, the results of this study are limited to those students in recovery.

Conclusion

Underage drinking and drug use continues to be a problem in our public schools. Minnesota has been at the forefront of the school choice movement and continues to provide a variety of educational programs for students with substance abuse problems. This study focuses on one of those programs, recovery-based high schools. The results from this study suggest that sober peer role models positively influence the substance use behaviors of other students at the school. Not only were role models found at the schools but these findings also suggest that students were transformed into role models while attending the school. Recovery school role models displayed behaviors and attitudes reflecting positive self-esteem. This increased self-esteem may help to empower students in recovery to maintain their sobriety in and outside the recovery school environment.

References

- Abbey, A., Zawacki, M.A., Buck, M.A., Clinton, A. M., & Auslan, P. (2001). Alcohol and sexual assault. *Alcohol Research & Health*, 25(1), 43-51.
- Akers, R. L., Krohn, M. D., Lanza-Kaduce, L., & Radosevich, M. (1979). Social learning and deviant behavior: A specific test of a general theory. *American Sociological Review*, 44(August), 636-655.
- Andrew, J., Smolkowski, K., Kops, H., Tildesley, E., Ary, D., & Harris, J. (1991). *Adolescent substance abuse and academic achievement and motivation*. San Francisco, CA: American Psychological Association.
- Association of Recovery Schools. (2006). *Website*. Retrieved January 6, 2006, from the World Wide Web: <http://recoveryschools.org>
- Association of Recovery Schools, (2006). Directory of Recovery-based Schools. <http://recoveryschools.org> , accessed September 2006.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bauman, K.E., & Ennett, S. T. (1994). Peer influence on adolescent drug use. *American Psychologist*, 63, 820-822.
- Bauman, K. E., & Ennett, S. T. (1996). On the importance of peer influence for adolescent drug use: Commonly neglected considerations. *Addiction*, 91, 185-198.

- Bowermaster, T. G., & Finch, A. J. (2003). *Posttreatment educational considerations for adolescents with chemical dependency*. Paper presented at the American Educational Research Association, Chicago, IL.
- Brown, S. A., Vik, P. W., & Creamer, V. A. (1989). Characteristics of relapse following adolescent substance abuse treatment. *Addict Behav*, *14*(3), 291-300.
- Bukoski, W. J. (1986). School-based substance abuse prevention: A review of program research. In S. Griswold-Ezekoye & K. L. Kumpfer & W. J. Bukoski (Eds.), *Childhood and chemical abuse* (pp. 95-115). New York: Haworth.
- Casemore, B. P. (1990). *Teen drug use: Impacts and outcomes*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Catalano, R. F., Hawkins, J. D., Wells, E. A., Miller, J. Y., & Brewer, D. (1991). Evaluation of the effectiveness of adolescent drug abuse treatment, assessment of risks for relapse, and promising approaches for relapse prevention. *Int J Addict*, *25*(9A/10A), 1085-1140.
- Catalano, R. F., & Hawkins, J. D. (1985). Project skills: preliminary results from a theoretically based aftercare experiment. In R. S. Ashery (Ed.), *Progress in the development of cost-effective treatment for drug abusers*, National Institute on Drug Abuse Research Monograph No. 58 (Vol. 58, pp. 157-181). Washington, DC: Sup of Docs, U.S. Govt. Printing Office.
- Center for Disease Control and Prevention. (1998). Leading causes of mortality and morbidity and contributing behaviors in the United States. World Wide Web <http://www.cdc.gov/nccdphp/dash/ahsumm/ussumm.htm>.

- Center for Disease Control and Prevention. (1994). Pregnancy, sexually transmitted diseases, and related risk behaviors among U.S. adolescents. *Adolescent Health: State of the Nation Monograph Series, No. 2*. CDC Pub. No. 099-4630. Atlanta: CDC
- Cleveland, H. H., & Wiebe, R. P. (2003). The moderation of adolescent-to-peer similarity in tobacco and alcohol use by school levels of substance use. *Child Development, 74*(1), 279-291.
- Cosden, M. (2001). Risk and resilience for substance abuse among adolescents and adults with LD. *Journal of Learning Disabilities, 34*(4), 352-358.
- Cumsille, P. E., Sayer, A. G., & Graham, J. W. (2000). Perceived exposure to peer and adult drinking as predictors of growth in positive alcohol expectancies during adolescence. *Journal of Consulting & Clinical Psychology, 68*, 531-536.
- Curran, P., Stice, E., & Chassin, L. (1997). The relationship between adolescent alcohol use and peer alcohol use: A longitudinal random coefficients model. *Journal of Consulting and Clinical Psychology, 65*, 130-140.
- DeJong, R., & Henrich, G. (1980). Follow-up results of a behavior modification program for juvenile drug addicts. *Addict Behavior, 5*, 49-57.
- Di Clemente, C. (1990). The emergence of adolescents as a risk group for human immunodeficiency virus infection. *Journal of Adolescent Research, 5*, 7-17.
- Diehl, D. (2002). Recovery High School. In S. L. Isaacs & J. R. Kickman (Eds.), *To improve health care: The Robert Wood Johnson Foundation Anthology, V*. San Francisco, CA: Jossey-Bass.

- Drug Strategies. (2003). *Treating teens: A guide to adolescent drug programs*. Washington, DC: Drug Strategies.
- Edwards, R. W. (1994). *Alcohol, tobacco, and other drug use by youth in rural communities*. North Central Regional Educational Laboratory. Retrieved January 30, 2006, from the World Wide Web:
<http://www.ncrel.org/sdrs/areas/issues/envrnmnt/drugfree/v1edward.htm>
- Esbensen, F. (1995). *Overview of the national evaluation of G.R.E.A.T.* Paper presented at the Academy of Criminal Justice Sciences, Boston, MA.
- Finch, A. J. (2005). *Starting a recovery school: A how-to manual*. Center City, MN: Hazelden Foundation.
- Finch, A. J. (2003). *A sense of place at Recovery High School: Boundary permeability and student recovery support*. Unpublished Ph.D. Dissertation, Vanderbilt University, Nashville, TN.
- Gibson, J. T. (1997). Rekindling the spirits of throw-away children. *New Directions for School Leadership*, 6, 1-9.
- Glaser, B.G., & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Grant, B. F., & Dawson, D. A. (1997). Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey. *Journal of Substance Abuse*, 9, 103-110.
- Harrison, P. A., & Hoffman, N. G. (1987). *CATOR Report: Adolescent residential treatment, intake and follow-up findings*. St. Paul: Ramsey Clinic.

- Hawkins, D., Catalano, R. F., Kosterman, R., Abbot, R., & Hill, K. G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Arch Pediatr Adolesc Med*, *153*, 226-234.
- Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: implications for substance abuse prevention. *Psychol Bull*, *112*(1), 64-105.
- Hedin, D. P. (1983). Influences on adolescent problem behavior: Causes, connections, and contexts. In R. Isralowitz & M. Singer (Eds.), *Adolescent substance abuse: A guide to prevention and treatment* (Vol. 6). New York: The Haworth Press.
- Hingson, R., & Winter, M. (2003). Epidemiology and consequences of drinking and driving. *Alcohol Research & Health*, *27*, 63-78.
- Horwitz, C. E. (2000). *Providers' perspectives on a charter sober high school: Recommendations, appropriate referrals, program content, and judicial-educational coordination*. Unpublished Ph.D., University of California, Berkeley/Alameda.
- Inaba, D. S., & Cohen, W. E. (2004). Uppers, downers, and all arounders: Physical and mental effects of psychoactive drugs (5th ed.). Ashland, OR: CNS Publications, Inc.
- Johnston, L. D., O'Malley, P.M., Bachman, J. G., & Schulenberg, J. (2005). *Monitoring the Future national survey results on drug use, 1975-2004. Volume I: Secondary school students*. Bethesda, MD; National Institute on Drug Abuse.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. (2008). *Monitoring the Future national results on adolescent drug use: Overview of key findings*,

2007 (NIH Publication No. 08-6418). Bethesda, MD: National Institute on Drug Abuse.

- Kandel, D. B. (1978a). Homophily, selection, and socialization in adolescent friendships. *American Journal of Sociology*, 84(2), 427-436.
- Kandel, D. B. (1978b). Similarity in real-life adolescent friendships. *Journal of Personality and Social Psychology*, 36, 306-312.
- Kauffman, J. M. (1992). *Characteristics of emotional and behavioral disorders of children and youth* (5th ed.). New York
- Kinney, J. (2003). *Loosening the grip: A handbook of alcohol information*.
- Latimer, W. W., Winters, K. C., Stinchfield, R., & Traver, R. E. (2000b). Demographic, individual, and interpersonal predictors of adolescent alcohol and marijuana use following treatment. *Psychol Addict Behav*, 14(2), 162-173.
- Lerner, J. (1997). *Learning disabilities: Theories, diagnosis, and teaching strategies* (7th ed.). Boston: Houghton Mifflin Company.
- Luehr, R. E. (2005). *Minnesota Student Survey 2004*. Roseville, MN: Minnesota Department of Education.
- Mac Kenzie, R. G. (1993). Influence of drug use on adolescent sexual activity. *Adolescent Medicine: State of the Art Reviews*, 4(2), 112-115.
- Maier, S. E., & West, J. R. (2001). Drinking patterns and alcohol-related birth defects. *Alcohol Research & Health*, 25(3), 168-174.
- May, P. A., & Gossage, J. P. (2001). Estimating the prevalence of fetal alcohol syndrome: A summary. *Alcohol Research & Health*, 25, 159-167.

Merriam, S.B. (1998). *Qualitative research and case study applications in education*.

San Francisco: Jossey-Bass.

Miles, M.B., & Huberman, A.M. (1994). *Qualitative Data Analysis: An expanded*

Sourcebook, 2nd Edition, Thousand Oaks: SAGE Publications, Inc.

Minnesota Department of Education, (2006), *Alternative Education Programs*,

http://education.state.mn.us/mde/Academic_Excellence/School_Choice/Public_School_Choice/Alternative_Education/index.html, (accessed September 2006).

Minnesota Department of Education, (2007a). *2007 Minnesota Student Survey:*

Statewide results.

<http://mn.drugfree.org/MN%20REPORTS/MSS%2007%20State%20Tables%20Final-corrected.pdf>, accessed March 2009.

Minnesota Department of Education (2007b). *2007 Minnesota Student Survey: Student*

Tables: Alternative schools and area learning centers.

<http://www.health.state.mn.us/divs/chs/mss/statewidetables/alternativeschoolsarealearningcenters07.pdf>, accessed March 2009.

Minnesota Department of Education (2009). *State Approved Alternative Programs*

(Demographics and MN Student Survey information):

<http://education.state.mn.us/mdeprod/groups/Choice/documents/Report/036488.pdf>, accessed March 23, 2009.

Minnesota Department of Public Safety. (2002). *What's the big deal?* Retrieved January

6, 2006, from the World Wide Web:

http://www.dps.state.mn.us/ots/resource_catalog/images/Whats_Big_D_fullbroch.pdf.

- Moberg, D. P. (2004). *R21 Grant Proposal Recovery Schools*. Madison: University of Wisconsin.
- Moberg, D. P., & Thaler, S. L. (1995). *An evaluation of Recovery High School: An alternative high school or adolescents in recovery from chemical dependence (Policy Paper 95-4)*. Madison: University of Wisconsin, Department of Population Health Sciences, Center for Health Policy and Program Evaluation.
- Mooney, A. J., Eisenberg, A., & Eisenberg, H. (1992). *The recovery book*. New York, NY: Workman Publishing Company, Inc.
- Morrison, M. A., & Smith, Q. T. (1987). Psychiatric issues of adolescent chemical dependence. *Pediatr Clin North Am*, 34(2), 4
- National Highway Traffic Safety Administration, (2004a). *2004 Final state traffic safety fact sheets*. Retrieved January 5, 2006, from the World Wide Web: <http://www.nhtsa.dot.gov/stsi/>.
- National Highway Traffic Safety Administration, (2004b). *Traffic safety facts 2004*. Retrieved January 5, 2006, from the World Wide Web: <http://www-nrd.htsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn/TSF2004.pdf>.
- National Institute on Drug Abuse. (1996). *National pregnancy and health survey: Drug use among women delivering live births 1992*. Rockville, MD: National Institute on Drug Abuse. Division of Epidemiology and Prevention Research.
- Oetting, E. R., Beauvais, F., & Edwards, R. W. et al. (1984). *The drug and alcohol assessment system: Book II: Instrument development, reliability, and validity*. Fort Collins, CO: Rocky Mountain Behavioral Sciences Institute

Oetting, E. R., & Beauvais, F. (1986). Peer cluster theory: Drugs and the adolescent.

Journal of Counseling and Development, 65, 17-22.

Oetting, E. R., Edwards, R. W., Kelly, K., & Beauvais, F. (1997). Risk and protective factors for drug use among rural American youth. *NIDA Research Monograph, 168*, 90-130

Patten, M.L. (2001). *Questionnaire Research: A practical Guide*. Los Angeles: Pyrczak Publishing

Patton, M.Q. (2002). *Qualitative Research & Evaluation Methods*, 3rd Edition, Thousand Oaks: SAGE Publications, Inc.

Ralph, N., & Barr, M. A. (1989). Diagnosing attention-deficit hyperactivity disorder and learning disabilities with chemically dependent adolescents. *J Psychoactive Drugs, 21*(2), 203-215.

Rhodes, J. E., & Jason, L. A. (1990). A social stress model of substance abuse. *Journal of Consulting and Clinical Psychology, 58*(4), 395-401.

Richter, S. S., Brown, S. A., & Mott, M. A. (1991). The impact of social support and self-esteem on adolescent substance abuse treatment outcome. *Journal of Substance Abuse, 3*(4), 371-385.

Roizen, J. (1997). Epidemiological issues in alcohol-related violence. In M. Galanter (ed.), *Recent developments in alcoholism* (Vol. 13). New York: Plenum Press.

Rubin, B. T. (2002). *Changing lives through changing stories: A phenomenological study of adolescents in recovery from addiction*. Unpublished Ph.D., Vanderbilt University, Nashville, TN.

- Schiff, M. M., & Cavaiola, A. A. (1990). Teenage chemical dependence and the prevalence of psychiatric disorders: Issues of prevention. *Journal of Adolescent Chemical Dependency, 1*(3), 35-45.
- Schuckit, M. A. (2000). *Drug and alcohol abuse* (5th ed.). New York: Kluwer Academic/Penum Publishers.
- Schulenberg, J., Maggs, J. L., Deilman, T. E., Leech, S., Kloska, D. D., & Shope, J. T. (1999). On peer influence to get drunk: A panel study of young adolescents. *Merrill-Palmer Quarterly, 45*, 108-142.
- Shoemaker, R., & Sherry, P. (1991). Posttreatment factors influencing outcome of adolescent chemical dependency treatment. *Journal Adolescent Chemical Dependency, 2*(1), 89-105.
- Shulman, G. D. (1985). Adolescents are not just short adults: Guidelines for treatment. *Focus on Family and Chemical Dependency, 8*(1), 21-22.
- Spear, S. F., & Skala, S. Y. (1995). Posttreatment services of chemically dependent adolescents. In E. Rahdert & D. Czechowicz (Eds.), *Adolescent drug abuse: Clinical assessment and therapeutic interventions (NIDA Research Monograph 156)* (pp. 341-364). Rockville, MD: U.S. Department of Health and Human Services, National Institute on Drug Abuse.
- Substance Abuse and Mental Health Services Administration. (2005). *2004 National survey on drug use and health*. Rockville, MD: SAMHSA, Office of Applied Studies.
- Substance Abuse and Mental Health Services Administration, Office of Applied Studies (2008). *Results from the 2007 National Survey on Drug Use and Health:*

National Findings (NSDUG Series H-34, DHHS Publication No. SMA 08-4343). Rockville, MD. .

- Svensson, R. (2000). Risk factors for different dimensions of adolescent drug use. *Journal of Child and Adolescent Substance Abuse, 9*(3), 67-90.
- Svobodny, L. A. (1982). Biographical, self-concept and educational factors among chemically dependent adolescents. *Adolescence, 17*(68), 847-853.
- Swaim, R. C., Bates, S. C., & Chavez, E. L. (1998). Structural equation socialization model of substance use among Mexican-American and White non-Hispanic school dropouts. *Journal of Adolescence Health, 23*, 128-138.
- Teas, T. G. (1998). *Chemically dependent teens with special needs: Educational considerations for after treatment*. Unpublished Masters, Bethel College, St. Paul, MN.
- Vaillant, G. E. (1988). What can long-term follow-up teach us about relapse and prevention of relapse in addiction? *British Journal of Addiction, 83*, 1147-1157.
- Winfree, L. T., & Bernat, F. P. (1998). Social learning, self-control, and substance abuse by eighth grade students: A tale of two cities. *Journal of Drug Issues, 28*(2), 539-559.
- Winfree, L. T., Sellers, C. S., & Clason, D. L. (1993). Social learning and adolescent deviance abstention: Toward understanding the reasons for initiating, quitting, and avoiding drugs. *Journal of Quantitative Criminology, 9*(1), 101-125.
- Winters, K. C. (1990). Clinical considerations in the assessment of adolescent chemical dependency. *Journal of Adolescent Chemical Dependency, 1*(1), 31-52.

- Winters, K. C., & Henly, G. A. (1989). *Personal experience inventory and manual*. Los Angeles: Western Psychological Services.
- Winter, K. C., Stinchfield, R., Opland, C., Weller, C., & Latimer, W. W. (2000). The effectiveness of the Minnesota Model approach in the treatment of adolescent drug abusers. *Addiction, 95*(4), 601-612.
- Winters, K. C., Stinchfield, R. D., Opland, E., Weller, C., & Latimer, W. W. (2000a). The effectiveness of the Minnesota Model approach in the treatment of adolescent drug abusers. *Addiction, 95*(4), 601-612.
- Winters, K. C., Stinchfield, R. D., Opland, E., Weller, C., & Latimer, W. W. (2000b). *Treatment of Adolescents with substance use disorders (TIP 32)*. Rockville, MD: Department of Health and Human Service, Public Health Service, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment.
- Wolcott, H.F. (2001). *Writing Up Qualitative Research*, 2nd Edition. Thousand Oaks: SAGE Publications, Inc.

Appendix A: Sample School Survey

The logo for the University of Minnesota, featuring the text "UNIVERSITY OF MINNESOTA" in white, serif, all-caps font centered within a dark red rectangular background.

Sample School Survey

Thank you for taking our survey. We are very interested in your opinions about you, your school, and alcohol, marijuana & other drugs. Your responses will be held in strict confidence and your identity will not be revealed in published reports.

The purpose of this study is to find out if you have role models in your school and, if so, what is that role model like and how does he or she affect your substance use.

YOUR answers will help your school and other schools working with students with alcohol, marijuana, and other drug use issues.

This survey will include questions about substance use.
For the purpose of this survey, these substances include:

- (1) alcohol (i.e., beer, wine, hard liquor, etc.)
- (2) marijuana
- (3) and other drugs (i.e., meth, heroin, improper use of prescription drugs, improper use of non-prescription drugs, glue for highs, etc.)

* Tobacco use is --NOT-- part of this survey.

This survey has three parts and may take about 10 minutes to complete. After each part, click on submit. You may make changes to your answers --ONLY-- before you click on submit. Please take your time and share your thoughts with us.

<< If you have any questions or would like this survey read to you, please ask the researcher.>>

UNIVERSITY OF MINNESOTA**Sample School Survey**

Part One includes questions about you and your school. When you finish with these questions, click on Submit. Any changes must be made -- BEFORE-- before you click on SUBMIT. Part 2 will then begin.

1

Please enter your survey number here.

2

Please check one.

- Male
- Female

3

Check current age.

- 12
- 13
- 14
- 15
- 16
- 17
- 18

- 19
 - 20
 - 21
 - 22
-

4

Check current grade in school.

- 6
 - 7
 - 8
 - 9
 - 10
 - 11
 - 12
-

5

How long have you attended this school program? (For example: two weeks, one semester, 2 years.)

- Less than one month
- 1 month up to 3 months
- 3 months up to 6 months
- 6 months up to 1 year
- 1 year or more than one year
- Other, please specify

6

I like the classes that I'm taking in school. Rate the following courses.

	1	2	3	4	N/A
	Strongly Disagree	Disagree	Agree	Strongly Agree	
Art	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Math	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7

Most of my classes... (check all that apply)

- I usually work at my own pace and do my own (unique) assignments.
- We work together as a group on most assignments.
- I have the same assignments as everyone else in class.
- We have class lectures and homework assignments.
- I receive credit for courses taken on school computers.

- I work out of packets for each of my courses for high school credit.
- I do the same work as everyone else in class.
- Most of my course work is done on the computer.

8

I look forward to going to school.

Strongly Disagree	Disagree	Agree	Somewhat Agree	Strongly Agree
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

9

I try my best while in class.

Strongly Disagree	Disagree	Agree	Somewhat Agree	Strongly Agree
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

10

My grades from my last report card included: (check all that apply)

- Mostly A's
- Some A's
- Mostly B's
- Some B's
- Mostly C's
- Some C's
- Mostly D's

- Some D's
- Mostly F's
- Some F's
- Mostly Pass
- Some Pass
- Mostly Fail
- Some Fail

11

I currently do the following:

- Have a job.
- Do volunteer work in the community.
- Do court-ordered community service work.
- Am supervised by the court system.

12

My favorite activity at school is...

13

What are your current plans?

1	2	3	4	5
not at all likely	Somewhat likely	Likely	More than likely	Very likely

I am going to drop out of school.

1
 2
 3
 4
 5

I am going to graduate from high school.

1 2 3 4 5

I am going to attend a post high school training program.

1 2 3 4 5

I am going to graduate from college.

1 2 3 4 5

I am going to join the Armed Forces (example: Army, Navy, Marines, etc).

1 2 3 4 5

14

If I have a problem or concern with alcohol, marijuana, or other drugs, I know someone at school who I can talk to. (Check all that apply.)

- No. There is no one at school I feel comfortable talking to.
- Yes, my friends.
- Yes, school counselor.
- Yes, teachers.
- Yes, another adult at school.
- Comments

15

My school checks for alcohol, marijuana, and other drug use. (Check all that apply.)

- No.
- Yes. Drug tests are used to check for drug use.
- Yes. My school keeps track of how many days I've been clean and sober.

- Yes. My school keeps track of how many AA or NA meetings I attend.
- Yes. Teachers, counselors, and/or the school nurse may report drug use.
- Yes. Other students may report drug use.
- Other, please describe.

16

What happens in school if someone uses alcohol, marijuana, or other drugs? (Check all that apply.)

- Reported to the principal or program director.
- Student can't return to school.
- Student is suspended.
- Parents meet with the principal.
- Student meets with the counselor.
- Students and staff meet as a group and decide what happens to the student caught using.
- Other, please describe.

17

Which words below describe you? (Check all that apply)

- a leader
- funny
- opinionated (holds strong views and beliefs)
- have many friends

- prefer to be by myself
- smart
- follower
- rebel (doesn't care what others think)
- happy
- loner
- care about other people
- dumb
- brave (has guts)
- Moody
- Looks "cool" or "hot"
- nice person
- Type one or two words that best describes you.



Survey Page 1

UNIVERSITY OF MINNESOTA

Sample School Survey



Part Two includes questions about substance use and your opinions about substance use. When you have finished with Part Two, click on Submit.

Any changes must be made --BEFORE-- you click on SUBMIT. You will then start Part 3.

18

Today, I feel I have control over my alcohol, marijuana, or other drug use.

Strongly agree	Agree	Disagree	Strongly disagree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19

How long has it been since your last drink or use of marijuana or other drugs?

- less than 2 weeks
- 2 to 4 weeks
- from 4 weeks to 3 months
- from 3 months to 6 months
- from 6 months to 1 year
- over a year
- Other, please specify

20

On how many events (such as parties) have you had alcohol, marijuana, or other drugs during the LAST 30 days?

- 0
- 1-2
- 3-5

- 6-9
 - 10-19
 - 20-39
 - over 40
-

21

How many times DURING a social event (such as a party) did you use alcohol, marijuana, or any other drugs last month?

- none
- 1 to 2
- 3 to 5
- over 5
- Other, Please Specify

22

If you do NOT use alcohol, marijuana, or other drugs, which factors below influenced your decision. (Mark all that apply.)

- Does not apply to me because I currently use alcohol, marijuana, or other drugs.
- Alcohol, marijuana, and other drugs make me feel physically sick.
- I believe that drinking or using marijuana or other drugs is bad for my health.
- I'm worried about what will happen to my body in 10, 15, or 20 years.
- Friends of mine (at my school) do NOT drink or use marijuana or other drugs.
- Friends of mine (at my school) encourage me to stay clean and sober.

- Friends of mine (who do NOT attend my school) do NOT drink or use marijuana or other drugs.
- Friends of mine (who do NOT attend school) encourage me to stay clean and sober.
- I look up to a student at my school who does NOT drink or uses marijuana or other drugs.
- I look up to a student at my school who encourages me to stay clean and sober.
- My brother(s) or sister(s) do not drink or use marijuana or other drugs.
- One or both of my parents would object.
- I would disappoint one or both of my parents.
- My AA/NA sponsor would be upset with me.
- I don't want to get in trouble and lose my job.
- In my community, people who drink or use marijuana or other drugs are looked down upon.
- Drinking or using marijuana or other drugs might get me in trouble with the police.
- Drinking or use of marijuana or other drugs is against my principles or religious beliefs.
- What I learned in drug treatment influences my decision.
- Alcohol and drug education at school.
- I might get kicked out of school.
- Drinking or use of marijuana or other drugs may affect my performance in school, sports, or other activities in a bad way.
- It's against school rules.
- Random drug tests (such as UA's).
- Alcohol, marijuana or other drugs are NOT available at my school.
- I feel better about myself when I'm clean and sober.

- I have more fun when I'm clean and sober.
- I don't want to look "stupid"
- I have more friends when I'm clean and sober.
- My "higher power"
- I have better friends when I'm clean and sober.
- Other reasons...

23

If you DO use alcohol, marijuana, or other drugs, which factors below influenced your decision. (Mark all that apply.)

- Does not apply to me because I currently do NOT use alcohol, marijuana, or other drugs.
- I like the way alcohol, or marijuana and other drugs makes me feel physically.
- I enjoy the "high."
- Helps me sleep.
- Friends of mine (at my school) drink or use marijuana and other drugs.
- Friends of mine (at my school) encourage me to drink or use marijuana and other drugs.
- Friends of mine (who do NOT attend my school) drink or use marijuana and other drugs.
- My friends (who do NOT attend school) encourage me to drink or use marijuana and other drugs.
- I look up to a student at my school who drinks or uses marijuana and other drugs.
- I look up to a student at my school who encourages me to drink or to use marijuana and other drugs.
- My brother(s) or sister(s) drink or use marijuana and other drugs.

- One or both of my parents encourage me to drink or use marijuana or other drugs.
- I want to rebel against family rules.
- In my community, drinking or using marijuana and other drugs are used to celebrate special occasions.
- It's something to do.
- Drinking or using marijuana and other drugs make me feel more a part of my community.
- I believe that drinking or using marijuana or other drugs is not dangerous to my health.
- I believe that it's OK to drink, or use marijuana and other drugs.
- I perform better in sports, music, or other school activities when I drink or use marijuana or other drugs.
- I am more creative when I drink or use marijuana or other drugs.
- I can concentrate more in school.
- Alcohol, marijuana and other drugs are available at my school.
- I feel better about myself when I'm drinking, using marijuana or other drugs.
- It helps me to deal with the stress in my life.
- I'm more fun to be around when I drink or use marijuana and other drugs.
- I have more fun when I'm drinking or using marijuana or other drugs.
- I have more friends when I'm drinking or using marijuana or other drugs.
- I have better friends when I'm drinking or using marijuana or other drugs.
- Other reasons...



24

How much influence do the following have on keeping you clean and sober?

1	2	3	4
No influence	Not much influence	Some influence	Most influence

My parents

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

My brothers and sisters

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

My health

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

My girlfriend

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

My boyfriend

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

How I feel about myself (If I feel sad, I drink more; if I feel happy, I stay sober)

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

My appearance (I look better when I'm clean and sober.)

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

My friends who do NOT attend my school

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

Adult friends

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

My job

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
-------------------------	-------------------------	-------------------------	-------------------------

My friends who drink and use marijuana and other drugs

1 2 3 4

My friends who do NOT drink and use marijuana and other drugs

1 2 3 4

I decide if I'm going to use or not use at the time.

1 2 3 4

25

How much influence do the following have on keeping you clean and sober?

1 2 3 4
No influence Not much influence Some influence Most influence

Community organizations like Boy Scouts or Boys & Girls Clubs

1 2 3 4

Religious organizations like churches, synagogues, and mosques

1 2 3 4

My "higher power"

1 2 3 4

Substance use support groups like AA and NA

1 2 3 4

Adult role models who live clean and sober lives

1 2 3 4

How I look to other people

1 2 3 4

My sponsor

1 2 3 4

What I see on TV

1 2 3 4

Knowledge on how alcohol, marijuana, or other drugs work in our bodies

1 2 3 4

I might end up in prison.

1 2 3 4

26

How much influence do the following have on keeping you clean and sober?

1	2	3	4
No influence	Not much influence	Some influence	Most influence

The music I listen to

1 2 3 4

Strategies I've use to deal with triggers (ex. breathing exercises, journal writing, etc)

1 2 3 4

People my age who live clean and sober lives

1 2 3 4

Medication that I take to keep me clean and sober

1 2 3 4

The effects of my use of alcohol, marijuana, or other drugs on my family or friends

1 2 3 4

TV shows

1 2 3 4

The possibility that I might hurt myself.

1 2 3 4

The possibility that I might hurt someone else.

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
<hr/>			
My school rules and regulations			
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
<hr/>			
My school teachers and counselors			
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
<hr/>			
My school friends			
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
<hr/>			
My school community			
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
<hr/>			
Role models at school who are my age			
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4

27

Have you relapsed in the past?

- No.
- Yes, but it was just a slip (a one-time thing).
- Yes, but I was able to stop on my own.
- Yes, I went back to treatment and now I'm clean and sober.
- Yes, many times. It's a struggle for me.

28

What are some reasons you have used alcohol, marijuana, or other drugs in the past?

- I became addicted to alcohol, marijuana, or other drugs and couldn't stop using.
- It made me feel good about myself.

- It helped me to deal with the stress in my life.
- It was easy to get.
- Friends, important to me, also drank or used marijuana and other drugs.
- I like the "high" or "buzz" from alcohol, marijuana, or other drugs.
- I drank or used marijuana or other drugs to make friends.
- My family drinks or uses marijuana and other drugs.
- Drinking or using marijuana or other drugs helped me to forget my problems.
- It was a thrill to break the law or be bad.
- Drinking or using marijuana or other drugs is how my family or community celebrates and I wanted to be a part of those celebrations. (For example, Viking and Packer football games, birthdays, promotion, etc.)
- Other, please describe.

29

What are your current views about alcohol, marijuana, and other drugs?
Please answer each question.

1	2	3	4
Strongly agree	Agree	Disagree	Strongly Disagree

For me, an occasional drink or two (or use of marijuana or other drugs) at a social event (such as a party) is OK.

1 2 3 4

For me, once a month, five or more drinks (or use of marijuana or other drugs) at one time is OK.

1 2 3 4

For me, a couple of times a month, five or more drinks (or use of marijuana or other drugs) at one time is OK.

1 2 3 4

Drinking and/or using marijuana or other drugs are fine for my friends but not for me.

1 2 3 4

30

I am committed to living a drug-free life.

Every day Most of the time Some of the time No

1 2 3 4

31

Please check all that apply. When having a good time, I...

- like to use alcohol, marijuana, or other drugs.
 - like to be around others using alcohol, marijuana or other drugs
 - don't like to be around others using alcohol, marijuana and other drugs
 - don't like to use alcohol, marijuana or other drugs.
 - will use or not use depending on how I'm feeling.
 - don't care if others use alcohol, marijuana or other drugs or not.
 - don't care if I drink, use marijuana, or use other drugs, or not.
-

32

I attend a support group after school to help me with my alcohol, marijuana, and other drug use. (Check all that apply.)

- No.
- Yes. I attend Alcoholics Anonymous (AA) meetings.
- Yes. I attend Narcotics Anonymous (NA) meetings.



Other, please describe.

33

Please answer each question. A substance abuse program MAY include: inpatient hospitalization, outpatient hospitalization, or counseling.

1
yes

2
no

In the past, I have COMPLETED a substance abuse program.

1

2

In the past, I have participated but did NOT complete a substance abuse program.

1

2

I am CURRENTLY participating in a substance abuse program.

1

2

I have NOT participated in a substance abuse program.

1

2

34

Before starting treatment for substance use, how many events (such as parties) in the last 30 days did you have alcohol, marijuana, or other drugs?

I have not received, nor am I receiving treatment for substance use.

none

1-2

3-5

6-9

- 10-19
 - 20-39
 - Over 40
-

35

Before starting treatment for substance use, how many times DURING a social event (such as a party) did you use alcohol, marijuana, or other drugs in a month?

- I have not received, nor am I receiving treatment for substance use.
- 1 to 2
- 3 to 5
- Over 5
- Other, please specify



Survey Page 2

UNIVERSITY OF MINNESOTA**Sample School Survey**



Part Three includes questions about students attending your school program. This is the last section. When you finish this section, click on Submit. Any changes must be made --BEFORE-- you click on SUBMIT.
You will have finished the survey!

36

Describe your friends at school. (Check all that apply.)

- I have no friends at school.
 - All of my friends at school use alcohol, marijuana or other drugs.
 - Some of my friends at school use alcohol, marijuana or other drugs.
 - None of my friends at school use alcohol, marijuana or other drugs.
-

37

How much do you think your friends at school care about you?

- Not at all.
 - Some or a little bit.
 - They care about me.
 - Very much or quite a bit.
-

38

Describe your friends who do NOT attend your school. (Check all that apply.)

- I have no friends who do not attend my school.
 - Those friends use alcohol, marijuana or other drugs.
 - Some of those friends use alcohol, marijuana or other drugs.
 - None of those friends use alcohol, marijuana or other drugs.
-

39

How much do you think your friends (who do NOT attend your school) care about you?

- Not at all.
- Some or a little bit.
- They care about me.
- Very much or quite a bit.
- All of my friends attend my school.

40

Who do you spend most of your time with AFTER school?

- Friends from my school.
- Friends who do NOT attend my school.
- No one. I don't have any friends.

41

Define the term, POSITIVE role model as it relates to drinking or marijuana or other drug use.

42

Define the term, NEGATIVE role model as it relates to drinking or marijuana or other drug use.

43

Who has the most influence over your alcohol, marijuana, and other drug use? (Click 1, 2, 3, or 4.)

- | | | | |
|---------------|-----------------|----------------------------|-------------|
| 1 | 2 | 3 | 4 |
| No influence. | Some influence. | A great deal of influence. | Don't know. |

A student at my school who I admire and look up to at school.

1 2 3 4

Friends attending my school.

1 2 3 4

Friends who do NOT attend my school.

1 2 3 4

My parents.

1 2 3 4

My brothers and sisters.

1 2 3 4

My teachers and other adults at my school.

1 2 3 4

My AA/NA sponsor.

1 2 3 4

My support groups like AA or NA.

1 2 3 4

My church or religious beliefs.

1 2 3 4

Other adults in my community.

1 2 3 4

44

I can think of a student who I look up to or admire at my school.

Yes.

No. (If no, Go to #54.)

45

Take a minute or two and think about a student at your school who you admire or look up to. Which words below describe that person?

I don't look up to or admire any student at my school.

A leader

Funny

Opinionated (holds strong views and beliefs)

Has many friends

Smart

Follower

Rebel (doesn't care what others think)

Happy

Loner

Cares about other people

Dumb

Brave (has guts)

Moody

Looks "cool" or "hot"

Nice person

One or two words that best describes this person.

46

Is this person...

- Male
- Female
-

47

Do you consider this person a role model?

- Yes
- No
- I don't look up to or admire any student at my school.
-

48

Describe your relationship with this person.

- Boyfriend/girlfriend
- Good friend
- Acquaintance
- Someone I've seen at school but he or she does not know who I am.
- I don't look up to or admire any student at my school.
-

49

How much time do you spend with this person...

1	2	3	4	N/A
No time	Very little time	Often	All of the time	
<hr/>				
at school?				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<hr/>				

outside of school (ex. church, parties, job)?

1 2 3 4

on the phone or computer?

1 2 3 4

during after school activities (example football)?

1 2 3 4

50

Thinking about that person in school, please answer every question.

1	2	3	N/A
yes	no	don't know	

Does this person talk to you about alcohol, marijuana, or other drugs?

1 2 3

Do "you" talk to this person about alcohol, marijuana or other drugs?

1 2 3

Do you think this person drinks, uses marijuana or other drugs?

1 2 3

Do you think this person has drunk alcohol, used marijuana, or used other drugs last year?

1 2 3

Do you think this person has ever drunk alcohol, used marijuana or used other drugs in his or her lifetime?

1 2 3

51

In your opinion, how many times a month do you think this person would think it was OK to drink, use marijuana, or use other drugs?

0

1-2

- - 3-5
 - 6-9
 - 10-19
 - 20-30
 - over 40
 - I don't look up to or admire any student at my school.
-

52

In your opinion, how many times during a social event (such as a party) do you think this person would think it was OK to use alcohol, marijuana, or any other drugs "last month?"

- I don't look up to or admire any student at my school.
- None
- 1 to 2
- 3 to 5
- over 5
- Other, Please Specify

53

How much influence do you think this person has over your drinking, marijuana use, or the use of other drugs?

- I don't look up to or admire any student at my school.
- No influence.
- Some influence.

- A great deal of influence.
-

54

Thank you for helping us understand how YOU feel about your school, drinking and other drugs, and the students who attend your school.

- I am NOT interested in an interview.
- Yes. I am interested and I have my consent forms signed.
- Yes. I am interested but need consent forms.
- I might be interested but I have some questions and will e-mail the researcher at lloy0017@umn.edu
-



SUBMIT

Appendix B: List of Student Aliases

Student Aliases Used in Dissertation	
Student Identifier	Alias
A10001	Andrea
AA1005	Andrew
CR10001	Claire
CR10004	Chris
CR10005	Carrie
G10001	Gail
G10003	Emma
H1001	Heath
H1002	Henry
I10011	Ian
L1003	Larry
L1004	Linda
NS10015	Nicole
NS10016	Nate
NS10017	Nancy
NS10018	Nicholas
P10001	Paul
RS10011	Robert
RS10012	Rachel
RS10013	Ron
RS10014	Renee
S10006	Sue
S10008	Sam
SH10010	Sandy
W10003	Wendy
W10004	Abby
W10006	Annie
WBL10005	Ashley
WBL10006	Barbara
WBL10008	Aaron
WB10010	Walter
WBL10012	William