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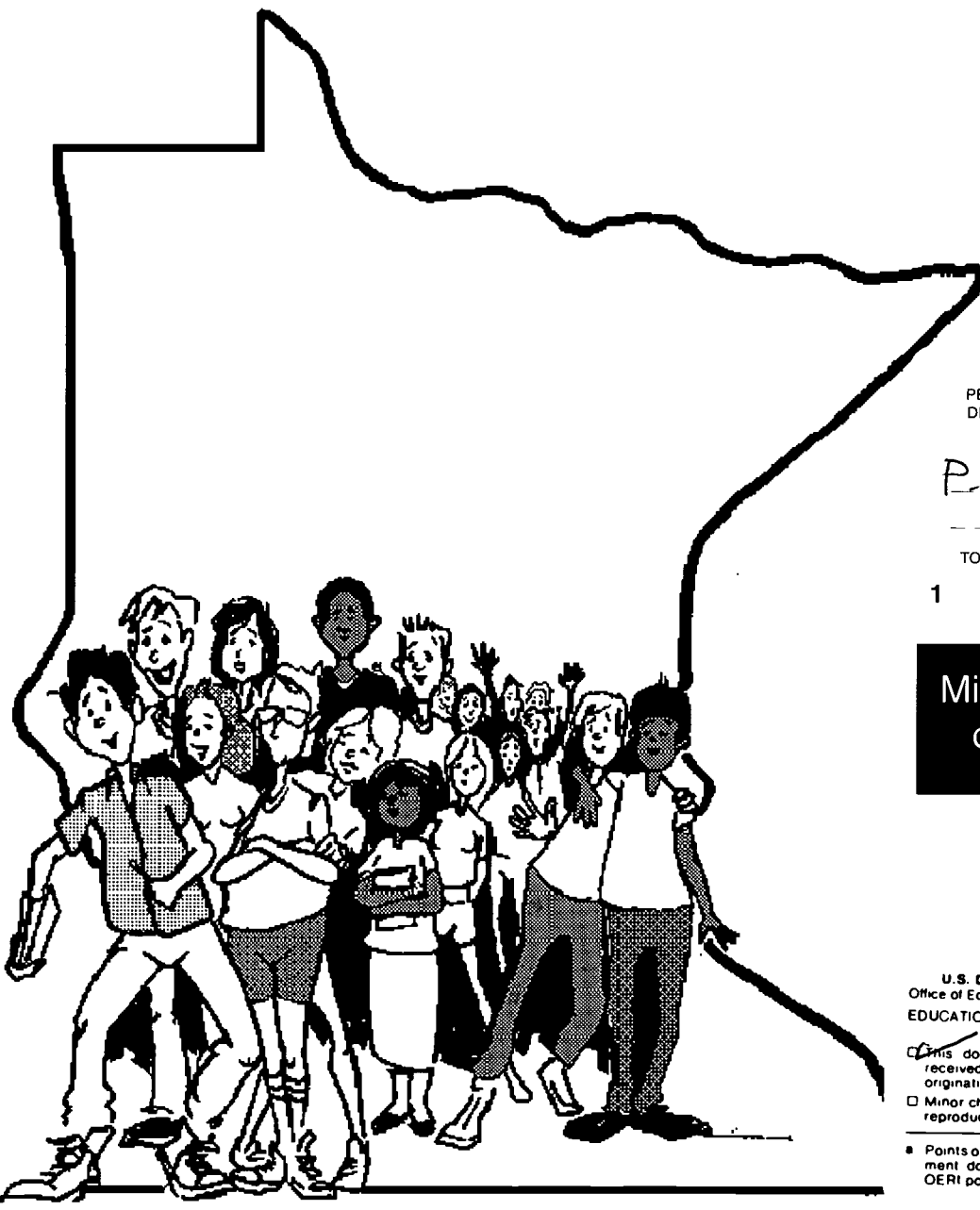
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ABSTRACT

This report uses text, graphs, and tables to present findings of a 1996 survey of 575 adolescents voluntarily participating in residential behavioral treatment facilities in Minnesota. Compared with public school students, these adolescents were: 62 percent male, more likely to be of color, especially American Indian, and twice as likely as other youth to come from single-parent households. Other characteristics of program participants included: high rates of serious family problems (especially parental substance abuse and physical abuse); high rates of sexual abuse; elevated levels of emotional distress; high rates of attempted suicide; high rates of early sexual activity; frequent placement in special classes for learning problems; high rates of antisocial behaviors, including gang involvement and weapons; and extremely high rates of substance abuse. Specific recommendations include: provision of extensive and intensive therapeutic services in cases of physical and sexual abuse; referrals for assessments of parental substance abuse and mental health problems; therapeutic services to address responsible sexual behavior; provision of substance abuse assessment and treatment; therapeutic services focusing on gang involvement and violent behavior; and sensitivity to diverse cultural backgrounds and gender differences. (Contains 28 references.) (DB)

# 1996 Minnesota Student Survey

## Residential Behavioral Treatment Facilities



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1996 Minnesota Student Survey

# Residential Behavioral Treatment Facilities

By

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Cover illustration by Kenneth Wurl

We would like to recognize the special contributions made by a number of individuals to this report and the ongoing Minnesota Student Survey projects. We sincerely thank Barbara Yates of the Minnesota Department of Children, Families and Learning for her vision, direction, and support of the Minnesota Student Survey over the years. We are indebted to Dean Zumach of the Minnesota Department of Children, Families and Learning for his tirelessness and congeniality in the coordination of the sites for data collection. We also thank the program staff at participating sites for administering the survey and attending to all the procedural details requested of them. We appreciate the creativity and the attention to detail demonstrated by Mitzi Nelson of the Minnesota Department of Human Services in her graphic design of this report. Michael Luxenberg and Matthew Christenson of Professional Data Analysts have provided prompt and thorough data base management and consultation that we gratefully appreciate. We are also grateful to MaryKay Haas and Jim Colwell from the Minnesota Department of Children, Families and Learning for their contributions to the Minnesota Student Survey. We also thank Don Allen from the Minnesota Department of Human Services for his helpful suggestions in response to an earlier draft of this report. Last, but not least, we extend our sincerest thanks to all of the adolescents who participated in the survey. We appreciate their honesty and patience in completing the long survey.

## Participating Sites

### Rule 5 Facilities

Archdeacon Gilfillan Center, Bemidji  
Austin Youth Ranch  
Bar-None Residential Treatment Services,  
Anoka  
Bush Annex, St. Paul  
Children's Residential Treatment Center,  
Minneapolis  
Diagnostic and Assessment Center, Duluth  
Gerard of Minnesota, Austin  
Gull House, Faribault  
Harbor Shelter and Counseling Centers,  
Burnsville, Hastings, and Stillwater  
Holcomb House, St. Paul  
Honors Home, Duluth  
Isanti Youth Ranch  
Leo A. Hoffmann Centers, Comfrey and  
St. Peter  
Group Home,  
Main House, Winona  
Northwood Children's Home, Duluth

### Rule 8 Facilities

Ain Dah Yung (Our Home) Shelter, St. Paul  
Baxter Youth Shelter  
Bello Lake Group Home, Bigfork  
Bello North Group Home, Effie  
Bridgeway Center, Worthington  
The City Group Home, Minneapolis  
Fond Du Lac Group Home, Duluth  
Home Away Centers, Inc., Minneapolis  
Home II, Inc. - II, St. Paul  
K.I.D.S. House, Inc., Becker  
Kandiyohi County Girls Group Home,  
Willmar  
Knollwood Boys Home, Grand Rapids  
Little Sand West, Remer  
Little Sand East, Remer  
Little Sand Lakeside, Remer  
Lutheran Social Services/Anoka County  
Shoreview  
Lutheran Social Services/Carlton Youth  
Shelter, Cloquet

# Acknowledgments

## Rule 5 Facilities

The Salvation Army Booth Brown House  
Services, St. Paul  
St. Cloud Children's Homes  
St. Joseph's Home for Children, Minneapolis  
Timberland Adolescent and Children's Program,  
Brainerd  
Wilder Juvenile Horizons, St. Paul  
Willmar Regional Treatment/Adolescent  
Treatment Center  
Wright Direction Group Home, Waverly

## Rule 8 Facilities

Lutheran Social Services/Crossroads of  
Owatonna  
Lutheran Social Services/Lake Superior  
Group Home, Saginaw  
Lutheran Social Services/Spring Hill  
Group Home, Detroit Lakes  
Mapletree Group Home, Inc., Maplewood  
Marshall County Adolescent Group Home,  
Warren  
Nelson Group Home, Nevis  
O.A.T.H. (Onamia Assessment and  
Treatment Home), Rochester  
Pathway Group Home, Minneapolis  
Range Shelter/Spirit Lake, Kinney  
St. Cloud Group Home  
Vonwald Shelter, Rochester

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## Executive summary

This report highlights some of the findings that emerged when the Minnesota Student Survey was administered to 575 voluntary participants in residential behavioral treatment facilities in 1996. In order to get an accurate comparison with other youth, these adolescents were matched with adolescents of the same gender and age randomly selected from the public school student population who had completed the same survey one year earlier.

The majority of young people in residential behavioral treatment were male (62%). Adolescents of color were overrepresented in residential behavioral treatment, particularly American Indian youth. Adolescents in these settings were twice as likely as other youth to come from single-parent households.

High rates of serious family problems characterized adolescents in residential behavioral treatment. Compared with their counterparts in public schools, adolescents in residential behavioral treatment were 2½ times more likely to report parental substance abuse, 3 times more likely to have been physically abused at home and 2½ times more likely to have witnessed physical abuse of other family members. In fact, almost half of all adolescents in residential behavioral treatment had been the victim or witness of physical abuse. Adolescents in residential treatment also had higher rates of sexual abuse by a family member than adolescents in public school; the rate was 4 times higher among females and 5 times higher among males.

Abuse outside the home also characterized adolescents in residential behavioral treatment. Compared with their counterparts in public school, adolescents in residential behavioral treatment had much higher rates of sexual abuse by a non-family member (3 times higher for females and 4½ times higher for males), date rape and date violence.

One-half of females and one-fifth of males in residential behavioral treatment had been victims of sexual abuse.

Adolescents in residential behavioral treatment acknowledged markedly elevated levels of emotional distress, including pervasive feelings of sadness, anxiety, and bad moods. Their rate of attempted suicide was 3 to 5 times higher than that for public school students. In fact, 62% of females and 42% of males in residential behavioral treatment said that they had tried to kill themselves at some point in their lives.

Three-fourths of both males and females in residential behavioral treatment reported that they had had sexual intercourse. They initiated sexual activity at a younger age than their counterparts in public schools and were less likely to protect themselves from pregnancy and sexually transmitted diseases. Almost one-quarter of females in residential behavioral treatment had been pregnant, a rate 3 times higher than that reported by females in public schools. Similarly, males in residential behavioral treatment were 4 times more likely than males in public schools to report that they had gotten a sexual partner pregnant.

Many more adolescents in residential behavioral treatment have had special classes for learning problems than public school students. One-half of adolescents in residential behavioral treatment have been placed in special classes at school.

Antisocial behaviors, such as physical assaults, shoplifting, and vandalism were much more common among adolescents in residential behavioral treatment than for public school students. Adolescents in residential behavioral treatment were also much more likely than



public school students to acknowledge gang involvement and to carry weapons when they attended school; 29% of males and 21% of females in residential behavioral treatment had carried a weapon to school in the previous 30 days.

Substance use was extremely common among the residential behavioral treatment population. Adolescents in residential behavioral treatment were 5½ times more likely than public school students to smoke at least a pack of cigarettes a day; about 2 times more likely to use marijuana, amphetamines, others' prescription drugs, and inhalants; 3 times more likely to use sedatives; 4 times more likely to use LSD or other hallucinogens and opiates; and 6 times more likely to use cocaine. They also had twice as many adverse consequences of their substance use than public school students.

The results of the survey of adolescents in residential behavioral treatment have implications for averting residential behavioral treatment placements. Clearly, earlier detection and effective interventions for children and families traumatized by physical and sexual abuse are essential. Improved access to professional assessments and services, for all families regardless of their financial resources, also would help to reduce the likelihood of serious behavioral problems among youth. Collaborative efforts now underway between county social service agencies, community mental health centers, and schools are an important step in this direction.

Survey results also suggest improvements to services for adolescents in residential behavioral treatment which may reduce emotional distress and behavioral problems. Specific recommendations include:

- Extensive and intensive therapeutic services for the effects of physical and sexual abuse should be developed or enhanced.
- Referrals for assessments of parental substance abuse and mental health problems should be available as part of the adolescent assessment process in residential behavioral treatment settings.
- Therapeutic services to address responsible sexual behavior should be incorporated or expanded in residential behavioral treatment.
- Substance abuse assessment and treatment needs to be available to all residents of behavioral treatment facilities, with continuity of care posttreatment.
- Therapeutic services should involve youth in identifying the perceived benefits of gang involvement and violent behavior, and developing safer and healthier alternatives.
- Ensure that all services for adolescents in residential behavioral treatment are sensitive and responsive to diverse cultural backgrounds and differing developmental needs of males and females.

## **Admissions to residential behavioral treatment facilities**

Residential behavioral treatment facilities are licensed by the State of Minnesota for the purpose of child care protection for children who need care away from their families. There are two types of institutions based on different licensing rules (Rule 5 and Rule 8). Both Rule 5 and Rule 8 institutions have an administrative organization and structure that has been approved by the state to provide shelter, food, training, treatment, and other care to children. Rule 5 institutions are facilities for care and treatment of more than ten children on a 24-hour basis. Children and adolescents in Rule 5 facilities must be diagnosed as a child with severe emotional disturbance by a mental health professional prior to placement. Rule 8 facilities tend to be group homes that provide a type of care not available through traditional foster families or institutions; children and adolescents do not need specialized diagnoses prior to admission. Group homes can provide adult guidance and professional services to children who are placed out of their homes. Rule 8 facilities are community-based and the programs are community-oriented.

## **Survey administration**

The Minnesota Student Survey was designed to elicit important information about adolescents from adolescents themselves. The survey included a variety of questions about their backgrounds, families, and schools, as well as about their feelings and behaviors. The Minnesota Student Survey was administered to public school students in 1989, 1992, and 1995, and to adolescents in special settings such as residential behavioral treatment centers in 1991 and 1996. Participation in the survey was voluntary and all surveys were completed anonymously.

During the 1996 survey period, 728 adolescents were in Minnesota residential behavioral treatment facilities. Eight percent of the adolescents refused to participate in the survey, and an additional 7% were unable to participate due to conflicting activities. Of the 617 completed surveys, 574 (93%) were used for analyses in this report, 404 from Rule 5 facilities and 170 from Rule 8 facilities. The remainder were excluded because of inconsistent responses or failure to complete essential items such as gender or age.

## **Matching adolescents in residential behavioral treatment with public school students**

This report compares the 1996 survey responses of adolescents in residential behavioral treatment with adolescents in the public schools. Each adolescent in the 1996 residential behavioral treatment survey population was randomly matched by age and gender with a public school student from the 1995 student survey population. This matching procedure ensures that differences found between the two groups are not the result of age or gender differences.

One difference between the two adolescent survey groups remains, however. The residential behavioral treatment adolescents took the survey about 1 year later than the public school students. Therefore, it is possible that some differences between the two groups might result from the time difference. For example, since drug use increased among students in Minnesota between 1992 and 1995,<sup>2</sup> a higher rate of drug use among adolescents in residential behavioral treatment than among students could conceivably be the difference between two different points in time. While this possibility cannot be dismissed, most of the differences found were much too large to be attributed to the 1 year that elapsed between the survey administrations. Furthermore, for many adolescent behaviors and environmental events, changes over time were almost negligible.

Rule 5 and Rule 8 residents were compared with respect to the major factors examined in this report. Because differences were minimal, results are presented for the combined populations.

For ease of presentation, percentages used in this report have been rounded to whole numbers. For a few tables and pie charts, this results in a total of 99% or 101% instead of 100%.

## Population description

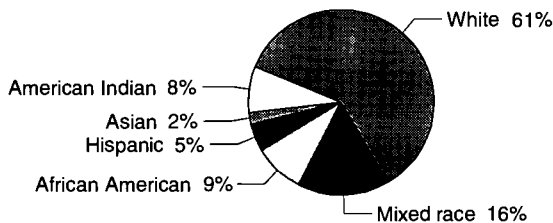
Adolescent males predominated in residential behavioral treatment settings (62%). Although there were fewer females in residential behavioral treatment, female adolescents were younger than males (68% versus 54% younger than 16, respectively). Two-thirds of the adolescents in these settings were 15 to 17 years old, with 30% younger than 15 and 4% 18 to 20 years old.

Adolescents of color comprise a larger proportion of the residential behavioral treatment system than the public school system, a finding true for all minority groups except Asian Americans. Placement rates were 8 times higher than would be expected based on general population figures for American Indians, 3 times higher for Hispanics and adolescents of biracial or multiracial heritage, and 2 times higher for African Americans.

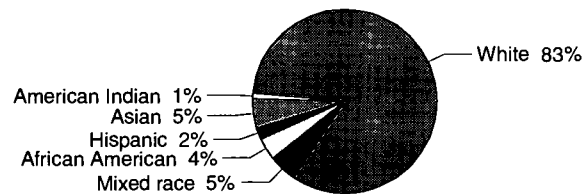
## Demographics of the residential behavioral treatment survey population

	Number	%
<b>Sex</b>		
Females	216	38
Males	359	62
<b>Age</b>		
11 or younger	2	<1
12	8	1
13	27	5
14	139	24
15	163	28
16	137	24
17	79	14
18-20	20	4

## Racial/ethnic background



Residential behavioral treatment



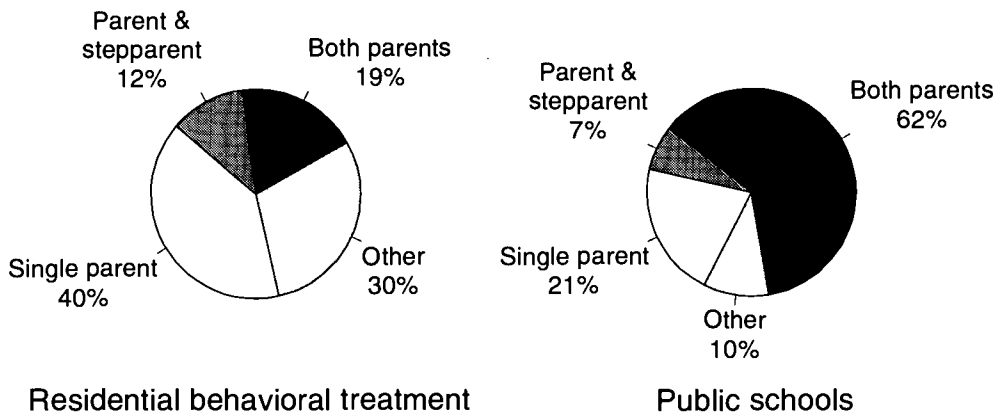
Public schools

## Family composition/relationships

Adolescents in residential behavioral treatment were much less likely to come from two-parent homes than adolescents in the public school population. In fact, students in the public school population were more than 3 times as likely to be living with both biological or adoptive parents as adolescents in residential behavioral treatment. Adolescents in residential behavioral treatment were more than twice as likely as students in public schools to live with single parents, other relatives, or non-relatives. Many more of the adolescents in residential behavioral treatment had parents who never married, who divorced, or who were deceased.

Despite the large differences in family composition between adolescents in residential behavioral treatment and students in public schools, differences in perceptions about interpersonal family relationships were modest. Similarly, adolescents in residential behavioral treatment facilities were somewhat less likely to think that their family cared about their feelings than adolescents in public schools. More students than adolescents in residential behavioral treatment believed that their parents care "quite a bit" or "very much" about them; however, large proportions of both groups felt cared for.

### Living situation



### Perception of family

How much do you feel... (Quite a bit or very much)	Residential behavioral treatment %	Public schools %
Your parents care about you?	74	87
Your family cares about your feelings?	61	67
Your family understands you?	43	42
Your family respects your privacy?	52	50
Your family has lots of fun together?	41	42

Adolescents in residential behavioral treatment were more likely than adolescents in public schools to say that they could talk about their problems with their mothers "most of the time." Excluding those whose fathers were "not around," adolescents in residential behavioral treatment were equally likely to talk about problems with their fathers as adolescents in public schools.

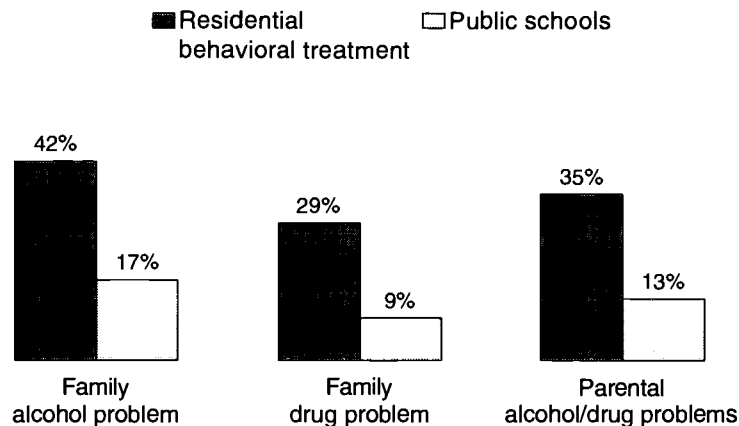
Adolescents were also asked about rules in their household. When parents had rules, adolescents in residential behavioral treatment did not differ much from those in public schools in their perceptions of whether the rules were fair or strict, or whether their parents followed through with consequences when the rules were broken. However, 22% of adolescents in residential behavioral treatment responded that their parents did not have many rules compared to 15% of adolescents in public schools. This higher level of permissiveness was associated with anti-social behavior among these adolescents.

## Family alcohol/drug problems

Adolescents in residential behavioral treatment were 2½ times more likely than public school students to report alcohol problems, and over 3 times more likely to report drug problems in their families. They were asked, "Has alcohol use by any family member repeatedly caused family, health, job, or legal problems?" followed by a similar question for drug use. When the responses for alcohol and drug problems were combined, but limited to adolescent assessment of their parents, the difference was also notable: adolescents in residential behavioral treatment were almost 3 times more likely than students to report that a parent had an alcohol or drug problem.

In the residential behavioral treatment population, family substance abuse, including parental substance abuse, was associated with greater sexual abuse and severe emotional health problems in the adolescents.

Family alcohol and other drug problems



## Family violence

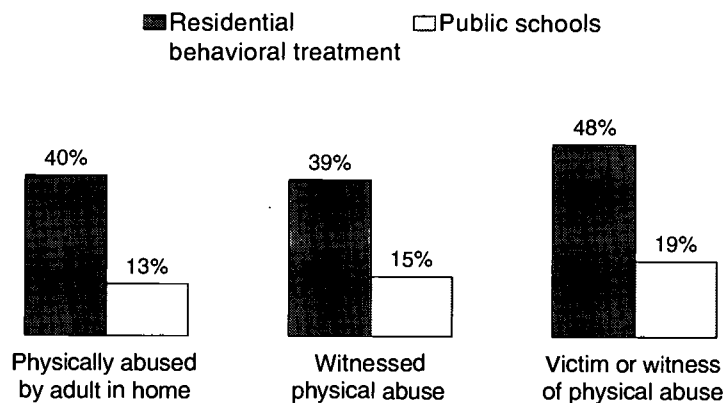
The survey included two questions about family violence: "Has any adult in your household ever hit you so hard or so often that you had marks or were afraid of that person?" and "Has anyone in your family ever hit anyone else in the family so hard or so often that they had marks or were afraid of that person?" A yes response to the first question was considered physical abuse and a yes response to the second question was considered witnessing physical abuse.

Adolescents in residential behavioral treatment were 3 times more likely than public

school students to have been physically abused in the home, and over 2½ times more likely to have witnessed other family members being physically abused. Considering both aspects of family violence means that almost half of the adolescents in residential behavioral treatment have either been physically abused, witnessed such abuse, or both.

Family violence was associated with severe self-esteem and emotional health problems among adolescents in residential behavioral treatment facilities as well as an increased risk for suicide attempt.

## Family violence



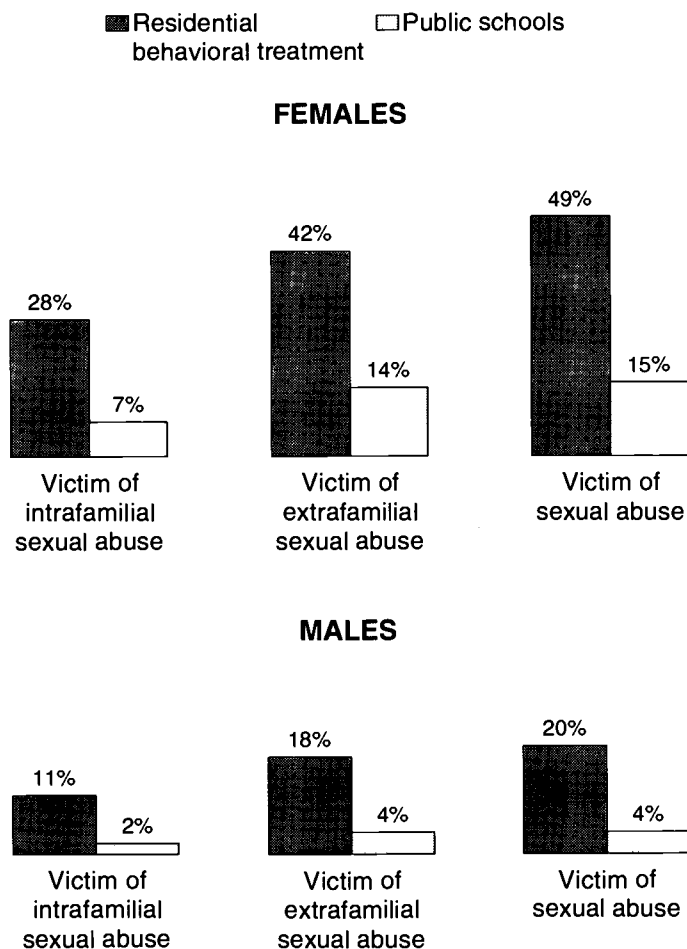
## Sexual abuse

Adolescents in residential behavioral treatment were much more likely to report histories of sexual abuse than students in public schools. The survey asked, "Has any older or stronger member of your family ever touched you sexually or had you touch them sexually?" and "Has any adult or older person outside the family ever touched you sexually against your wishes or forced you to touch them sexually?" Intrafamilial (within the family) sexual abuse was 4 times more likely to be reported by females in residential behavioral treatment than by females in public schools, and over 5 times more likely to be reported by males in residential behavioral treatment than by males in public schools. Extrafamilial (outside the family) sexual

abuse was approximately 3 times more likely to be reported by females and over 4 times more likely to be reported by males in residential behavioral treatment than by their public school counterparts. Considering both types of sexual abuse reveals that half the females in residential behavioral treatment had experienced sexual abuse compared to one in five males.

A history of sexual abuse was associated with an increased risk for physical abuse, extrafamilial sexual abuse, date violence and rape, severe self-esteem and emotional health problems, and suicide attempts. In addition, many victims of sexual abuse in the residential behavioral treatment population were more likely to be sexually active.

### Sexual abuse



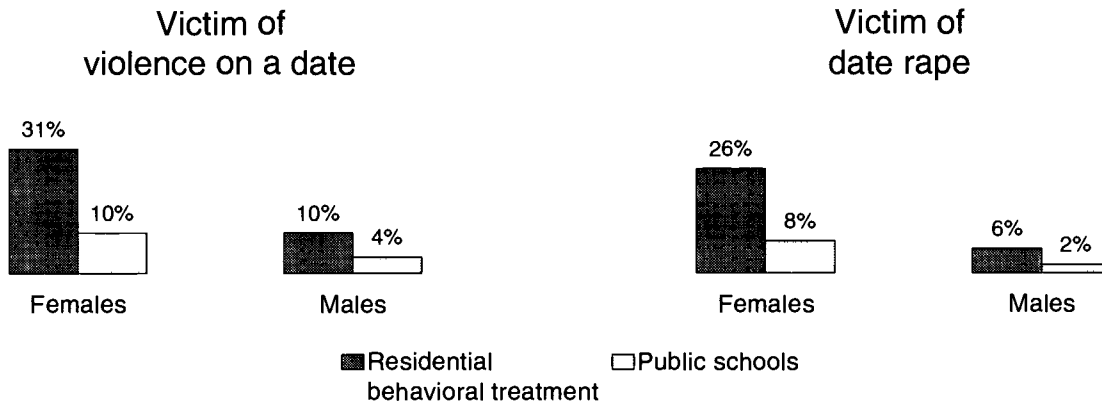


## Date violence and rape

Survey questions also asked about date violence and date rape (which are not included in the definitions of physical and sexual abuse used in this report). The questions asked, "Have you ever been the victim of violence on a date?" and "Have you ever been the victim of date rape?" Females in residential behavioral treatment were much more likely than females in public schools to report date violence (3 times higher) and date rape (more than 3 times higher). Males in residential behavioral treatment were 2½ times more likely than males in public schools to report being a victim of date violence. Although being a

victim of date rape was reported by only a small percentage of both male populations, males in residential behavioral treatment facilities were 3 times more likely to report it than males in public schools.

Both date violence and rape were reported much more frequently by females than males in residential behavioral treatment. Many individuals who reported date violence also reported date rape. Date violence and rape were often associated with severe self-esteem and emotional health problems as well as an increased likelihood of suicide attempts and sexual activity among adolescents in residential behavioral treatment.



## Multiple victimizations

To examine differences in multiple experiences of abuse, five measures of victimization were considered: intrafamilial sexual abuse, extrafamilial sexual abuse, intrafamilial physical abuse, date violence, and date rape. The proportions that reported two or more of these experiences included 30% of the residential behavioral treatment adolescents compared with only 8% of the public school students.

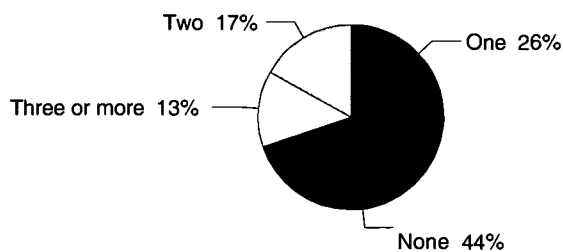
Differences between the two survey populations were even more apparent when the threshold was three victimization experiences and genders were examined separately. While this high level of victimization was reported by 6% of males in residential behavioral treatment compared with 2% of male students, 24% of females in residential behavioral treatment had been victimized repeatedly compared with 7% of female students.

Further analyses showed that a history of physical abuse within the home was associ-

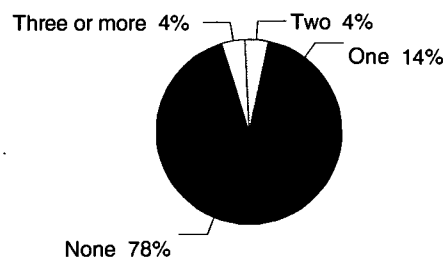
ated with a higher risk of date violence and date rape for both females and males. A history of sexual abuse within or outside the home also was associated with a higher risk of date violence and date rape. These findings indicate that childhood abuse greatly increases the vulnerability of adolescents to repeated victimization.

Adolescents in residential behavioral treatment who were victims of multiple abusive experiences were very vulnerable to a host of other problems. These individuals were more likely than non-victims to have severe self-esteem and emotional health problems and to have attempted suicide, and less likely to think their family cared about them and to have parents with an alcohol or drug problem. These associations increased with the number of victimization experiences so that adolescents who were physically and sexually abused were more likely to have these problems than individuals who experienced only one of these traumatic events.

Victimization experiences



Residential behavioral treatment



Public schools

## Low self-esteem

Consistent differences in self-esteem were observed between adolescents in residential behavioral treatment facilities and public school students. Adolescents in residential behavioral treatment facilities were less likely than their counterparts in public schools to believe they are able to do things as well as their peers, to usually feel good about themselves, and to be satisfied with themselves. They were more likely than students in public schools to feel that they can't do anything right, to feel that their lives are not very useful, to feel that they don't have much to be

proud of, and to sometimes think that they are no good. Despite the differences, less than half of adolescents in either population had generally negative opinions about themselves.

Even though only a small number of adolescents in residential behavioral treatment facilities had severe self-esteem problems, these individuals were very likely to have attempted suicide. Not surprisingly, these individuals tended to report emotional health problems as well. Also, they were more likely than adolescents with higher self-esteem to feel that their family did not care about them.

Low self-esteem	Residential behavioral treatment %	Public schools %
I am able to do things as well as most other people (Disagree)	17	11
I usually feel good about myself (Disagree)	24	14
On the whole, I'm satisfied with myself (Disagree)	26	16
I feel like I can't do anything right (Agree)	28	16
I feel that my life is not very useful (Agree)	34	17
I feel I do not have much to be proud of (Agree)	39	21
Sometimes I think that I am no good (Agree)	42	30

## Emotional distress

In contrast to rather moderate differences in low self-esteem, differences between adolescents in residential behavioral treatment and adolescents in public schools with respect to measures of emotional distress were quite pronounced. The survey asked a variety of questions about mood states for the previous 30-day period. Adolescents in residential behavioral treatment were almost 3 times more likely than their counterparts in public schools to report pervasive feelings of sadness, about 2½ times more likely to be nervous, worried, or upset, about 2 times more likely to report bad moods and feelings of dis-

couragement or hopelessness, and at least 1½ times more likely to be dissatisfied with their personal lives and feeling under great stress.

Adolescents in residential behavioral treatment facilities with severe emotional health problems were more likely to have been sexually abused or raped by a date than individuals without emotional health problems. It is apparent that sexual exploitation has a profound impact on emotional well-being. In addition, severe emotional health problems were associated with multiple drug use and suicide attempts among adolescents in residential behavioral treatment.

<b>Emotional distress</b>	Residential behavioral treatment %	Public schools %
During the past 30 days...		
Have you felt sad? (All or most of the time)	36	13
How has your mood been? (Bad or very bad)	12	6
Have you felt nervous, worried, or upset? (All or most of the time)	38	15
Have you felt so discouraged or hopeless that you wondered if anything was worthwhile? (Extremely or quite a bit)	35	18
Have you felt satisfied with your personal life? (Somewhat or very dissatisfied)	34	21
Have you felt you were under any stress or pressure? (Quite a bit or almost more than I could take)	54	37

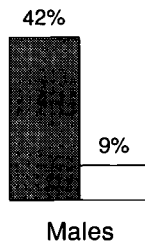
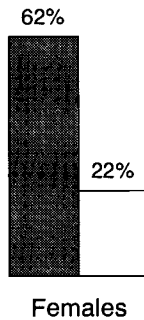
## Suicidal behavior and self-injury

More adolescents in residential behavioral treatment reported suicidal thoughts in the previous month than adolescents in public schools (42% versus 25%). The difference in lifetime suicide attempts, however, was much greater than for recent suicidal ideation. Females in the residential behavioral treatment population were almost 3 times more likely than their public school counterparts to report that they had tried to kill themselves. The problem was even worse for males; males in residential behavioral treatment facilities were almost 5 times more likely to report that they had ever tried to kill themselves than males in public schools. In fact, almost one-third of females and just under one-half of males in residential behavioral treatment said they had attempted suicide.

Adolescents were also asked whether, during the previous 12 months, they had ever hurt themselves on purpose (such as by cutting or burning themselves). Females in residential behavioral treatment were almost 2 times more likely than females in public schools to report deliberate self-injury. The difference was even greater for males; males in residential behavioral treatment were over 2 times more likely than males in public schools to report deliberate self-injury.

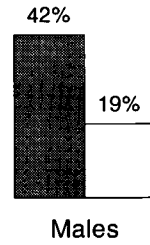
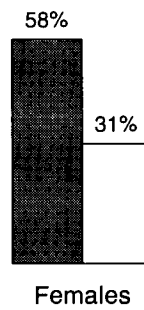
The high rates of suicide attempt and self-injury observed among the residential behavioral treatment population are consistent with the high rates of physical and sexual abuse reported by these adolescents. Not surprisingly, adolescents who reported self-injurious behaviors also had significant self-esteem and emotional health problems, and felt that their family did not care about them.

Suicide attempts



■ Residential behavioral treatment  
□ Public Schools

Deliberate self-injury in past 12 months



# Sexual activity

Adolescents in residential behavioral treatment were much more likely than their counterparts in public schools to have had sexual intercourse, and the difference was more pronounced for females. Despite their young age, 3 out of 4 males and females in residential behavioral treatment said they had had sexual intercourse. In contrast, approximately one-third of the students in public schools reported having had sexual intercourse.

Adolescents in residential behavioral treatment were more likely than public school adolescents to have started sexual activity at a very young age, with 86% of the sexually active adolescents in residential behavioral treatment saying that their first experience had occurred by age 14 compared with 63% of the sexually active adolescents in public schools.

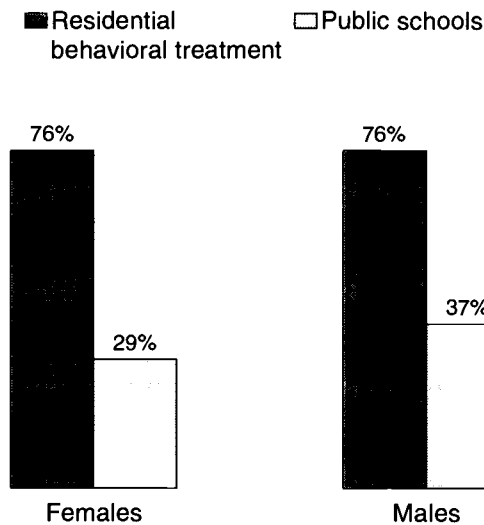
With respect to both the high rate of sexual activity and the early age of initiation into sex among adolescents in residential behavioral treatment, it is important to note that such sexual activity may not have been voluntary. It is possible that, for many adolescents, their first sexual experience was coerced since half

of the females and one out of five males said they had been sexually abused.

Also, sexually active adolescents in residential behavioral treatment were less likely than their counterparts in public schools to report using protection against pregnancy and/or sexually transmitted diseases the last time they had sexual intercourse. Condoms were the most commonly reported method of protection, used by 54% of the sexually active adolescents in residential behavioral treatment compared with 65% of the sexually active adolescents in public schools. Birth control pills (alone or in combination with condoms) were used by an equal percentage of the sexually active adolescents in both survey populations.

The proportion of females who have been pregnant was 3 times higher in the residential behavioral treatment facilities than public schools. Twenty-two percent of females in residential behavioral treatment have been pregnant compared with 7% of females in public schools. Proportionally more males in residential behavioral treatment than males in public schools reported having gotten a sexual partner pregnant (16% compared with 4%).

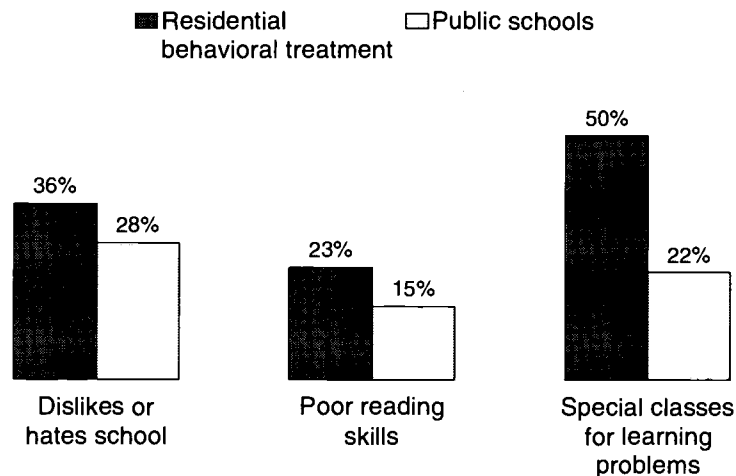
## Sexual activity



Adolescents in residential behavioral treatment were more likely than adolescents in public schools to say that they dislike or hate school, although the difference between the two groups was not large. In fact, most adolescents in both groups said that they planned to finish high school or go on to post-secondary education; only 10% of adolescents in residential behavioral treatment compared with 3% of adolescents in public schools said that they would like to quit school as soon as they can.

More adolescents in residential behavioral treatment than in public schools also said that their reading skills had prevented them from keeping up with classwork, but the proportions in both groups were relatively small. The largest difference between the two groups of adolescents was in the proportion reporting that they had been in special classes for learning problems. Compared to adolescents in public schools, more than twice as many adolescents in residential behavioral treatment reported such special class placement.

## School factors



# Antisocial and illegal behaviors

## Delinquent behavior

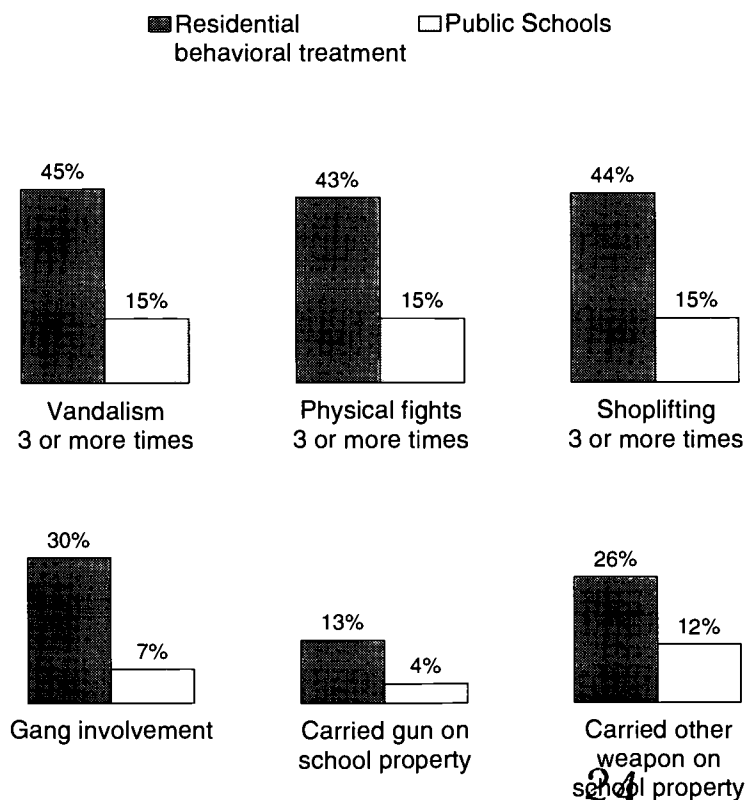
Adolescents in residential behavioral treatment facilities were much more likely than their counterparts in public schools to report antisocial behaviors during the previous 12 months. Acts of vandalism, hitting or beating someone up, and shoplifting at least 3 times in the previous year were reported by almost half of the adolescents in residential behavioral treatment. These rates were roughly 3 times higher than those for adolescents in public schools. Adolescents in residential behavioral treatment also were more likely to say that they get a “kick” out of doing dangerous things than adolescents in public schools (55% versus 34%).

Even more dangerous behavioral indicators distinguished the two groups of adolescents. Adolescents in residential behavioral treatment were much more likely than adolescents in public schools to report spending time in a gang, to say that they have carried a gun on

school property, and to have carried weapons other than guns on school property. While males in residential behavioral treatment were much more likely than females in residential behavioral treatment to carry guns to school, the gender difference is smaller for other weapons; 18% of males and 6% of females had carried guns, and 29% of males and 21% of females had carried other weapons. Also, males were more likely to be involved in a gang themselves whereas females were more likely to have friends in a gang.

The high rates of antisocial behavior reported by adolescents in residential behavioral treatment facilities are associated with increased sexual activity.

Delinquent behaviors in past 12 months





## Recent trends in substance use

Substance use among adolescents is of heightened interest recently because of increases in the use of cigarettes, marijuana, LSD, and other drugs reported in a variety of national studies.<sup>3,4</sup> Overall, the trends in Minnesota have mirrored those reported nationally, as shown in the comparison of Minnesota Student Survey results from 1989, 1992, and 1995.<sup>2</sup>

Although the focus of this report is the comparison between Minnesota adolescents in residential behavioral treatment and Minnesota public school students, the recent national and state trends provide a helpful context for evaluating the magnitude of the differences found between these groups of young people.

The national prevalence of cigarette smoking has steadily increased since 1992 among adolescents of all ages.<sup>5</sup> Minnesota smoking rates among adolescents have also increased and are actually higher than national rates.<sup>2</sup>

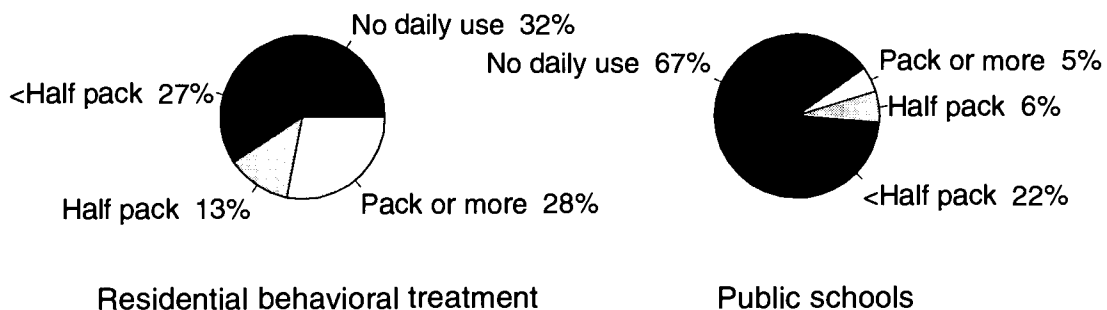
Nationally, alcohol use among adolescents declined from the 1980s through 1993 and then leveled off.<sup>3</sup> In Minnesota, the declines in alcohol use continued through 1995, and

the Minnesota rate of alcohol use among adolescents was lower than the national rate. Trends for marijuana were markedly different, however. Marijuana use increased dramatically between 1992 and 1995 both nationally<sup>3</sup> and in Minnesota,<sup>2</sup> but the state rates remained lower than the national rates. National surveys have also shown increases in other drugs, such as LSD and cocaine.<sup>3</sup> Even with the recent increases, the overall prevalence rates for drugs other than marijuana remained relatively low in 1995. All drug use rates were well below peak levels seen in the late 1970s and early 1980s. Minnesota adolescent drug use rates were lower than national rates in 1995 for inhalants, LSD and other hallucinogens, cocaine, and opiates, but higher for amphetamines.<sup>2</sup>

## Cigarette use

Adolescents in residential behavioral treatment were much more likely to smoke cigarettes on a daily basis than adolescents in public schools (68% versus 33%). The difference between the two groups of adolescents was even more pronounced for heavy smoking (at least a pack a day). Adolescents in residential behavioral treatment were 5½ times more likely to smoke heavily than adolescents in public schools.

Daily cigarette use in past 30 days



## Alcohol and drug use prevalence

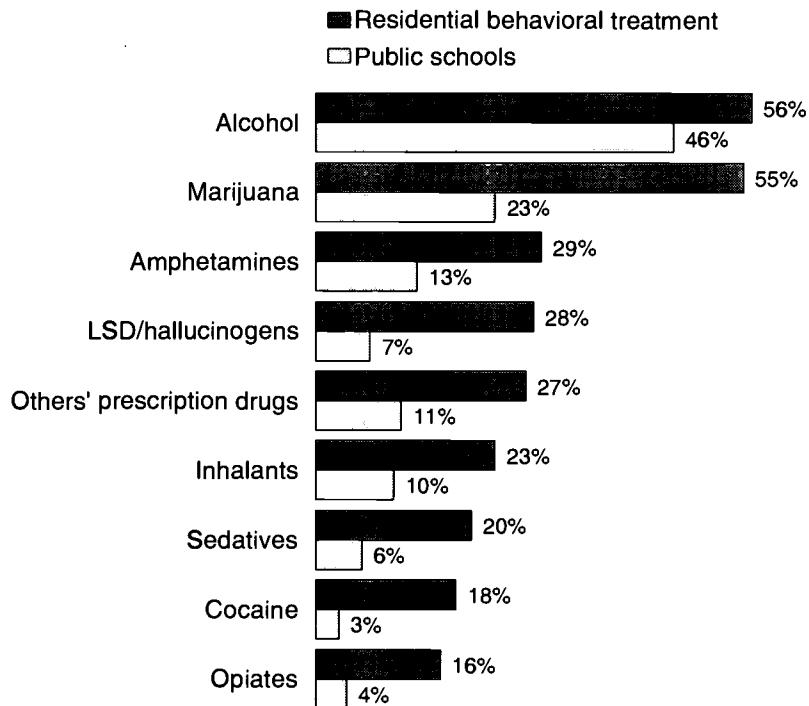
Adolescents in residential behavioral treatment were much more likely than adolescents in public schools to report the use of every substance inquired about in the survey, and they were more likely to initiate substance use at an earlier age. Alcohol and marijuana were the two most commonly used substances by adolescents in both groups, followed by amphetamines, LSD and other hallucinogens, and other people's prescription drugs. Opiates, cocaine, sedatives, and inhalants were the least commonly used drugs by adolescents in both groups.

Examining reports of use during the previous 12 months revealed that the proportional differences between adolescents in residential behavioral treatment and public schools were smallest for alcohol. Adolescents in residential behavioral treatment facilities were some-

what more likely to use alcohol than their public school counterparts. For all other substances, the differences in the proportions of users between the groups were much larger. Adolescents in residential behavioral treatment facilities were about 2 times more likely to use amphetamines and inhalants, 2½ times more likely to use marijuana and others' prescription drugs, 3 times more likely to use sedatives, 4 times more likely to use LSD or other hallucinogens and opiates, and 6 times more likely to use cocaine than their public school counterparts.

The higher rates of substance use prevalence reported by adolescents in residential behavioral treatment facilities are associated with higher levels of other antisocial activity, being a victim of date rape, severe emotional health problems, sexual activity, and suicide attempts.

Substance use prevalence in past 12 months



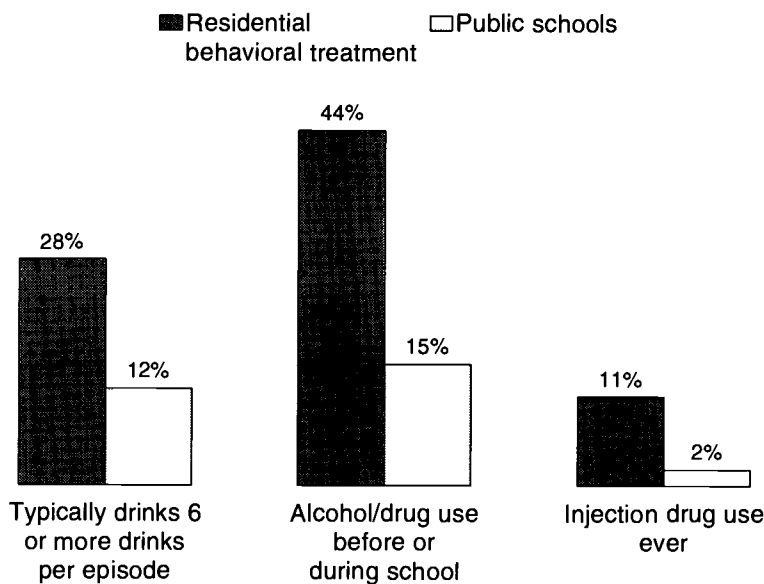
## High-risk substance use

In addition to higher overall substance use, adolescents in residential behavioral treatment engaged in more dangerous drinking and drug use behaviors than their public school counterparts. They were 2 times more likely to drink at least six drinks when they drank, almost 3 times more likely to use alcohol or drugs before or during school, and 5½ times more likely to have injected drugs, a very risky behavior, especially in light of possible HIV transmission.

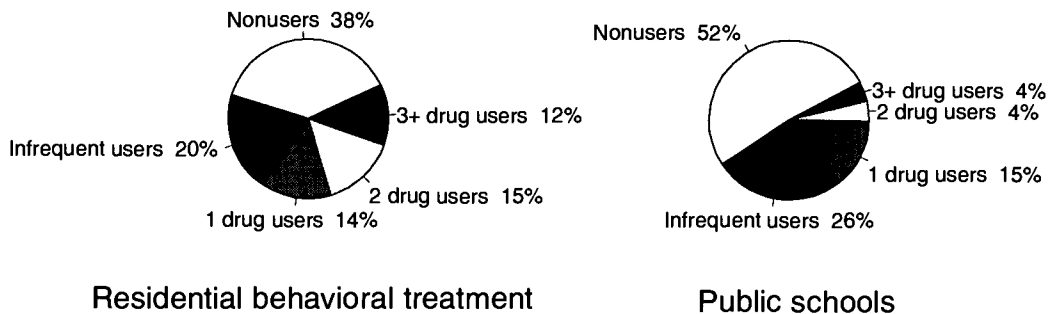
To illustrate differences in the use of multiple drugs, a hierarchy of substance use was created based on use in the past 12 months.

Adolescents who had not used any substances in the past 12 months were classified as nonusers. Adolescents who did not use any drug more than 9 times were classified as infrequent users. Those who used only one substance 10 or more times were classified as 1-drug users, and those who used two substances 10 or more times each were classified as 2-drug users. The most severe pattern was the use of at least three drugs 10 or more times each; adolescents with this pattern were classified as 3-or-more-drug users. Adolescents in residential behavioral treatment facilities were more than 3 times more likely than adolescents in public schools to be 2-or-more-drug-users.

## High-risk substance use behaviors



## Multiple substance use in past 12 months



Residential behavioral treatment

Public schools

# Antisocial and illegal behaviors

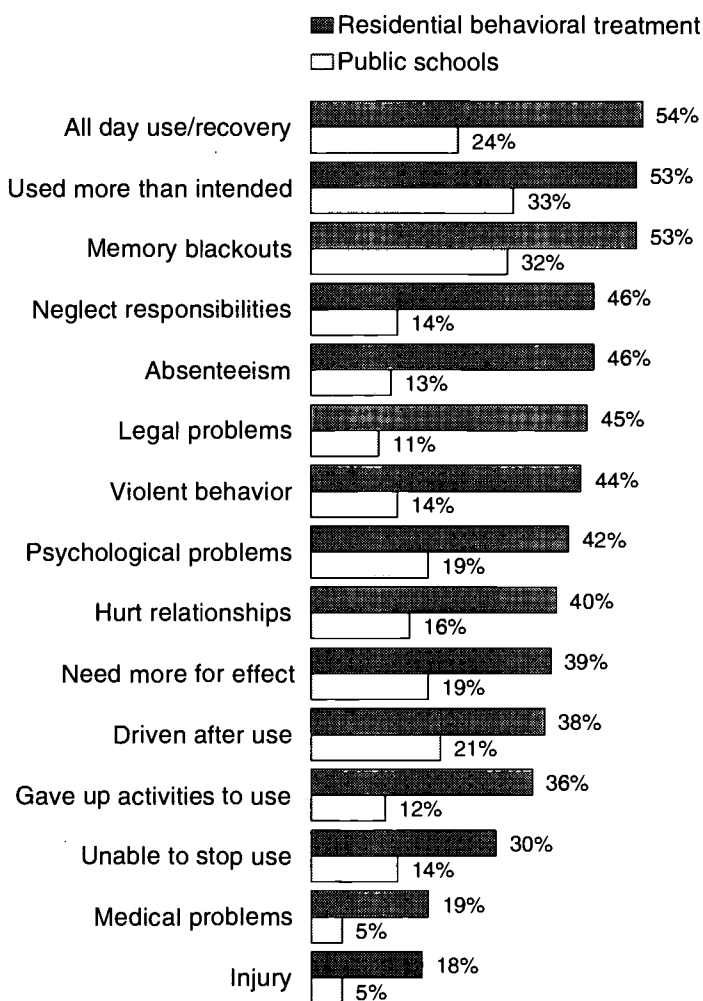
## Consequences of substance use

Consistent with their higher levels of substance use, adolescents in residential behavioral treatment also reported many more adverse consequences of their use in the past 12 months than public school students. The average number of consequences of use reported by adolescents in residential behavioral treatment who used during the past year was 4.4 compared with 2.4 for the adolescents in public schools.

More than half of the substance-using adolescents in residential behavioral treatment

reported the following indications of impaired control over substance use: spending an entire day using or recovering from the effects of use, using more than intended, and memory blackouts. In addition, almost half reported social or vocational impairments such as neglect of responsibilities, absenteeism, legal problems while using, and violent behavior while using. The symptom profile among adolescents in residential behavioral treatment suggests that the majority of substance users in this setting need assessments and possibly treatment for substance abuse or dependence.

Substance use consequences associated with past 12 month use



In 1996 more residential behavioral treatment sites participated in the Minnesota Student Survey than in 1991,<sup>1</sup> and the number of adolescents participating was also greater. The high participation rate for the 1996 survey assured that the 1996 sample was representative of the residential behavioral treatment population as a whole.

Comparing the results of the 1996 and 1991 residential behavioral treatment surveys reveals many consistent results. Family alcohol and other drug problems, attitudes towards school, perceptions of family caring, self-esteem, and deliberate self-injury were virtually unchanged. The mean age and the gender ratio were about the same in 1996 as in 1991. In contrast, the proportion of adolescents of color increased substantially from 28% in 1991 to 39% in 1996. The proportion of adolescents in residential behavioral treatment from single-parent households also increased.

In 1996, fewer adolescents in residential behavioral treatment reported witnessing family violence, being a victim of physical and sexual abuse, and engaging in sexual activity than in 1991; however, more reported emotional distress and antisocial behaviors. Additionally, more males in residential behavioral treatment in 1996 reported an attempted suicide than in 1991. While the prevalence of alcohol and inhalant use remained about the same for the two survey years, the prevalence of marijuana, amphetamine, and cocaine use increased in 1996, mirroring trends seen among adolescents in Minnesota and throughout the United States.<sup>2-4</sup>

To establish a context for evaluating the level of problems among adolescents in residential behavioral treatment, each 1996 residential behavioral treatment survey participant was matched with a public school student of the same gender and age who participated in the statewide 1995 survey. The comparisons revealed that the 1996 residential behavioral treatment population differed from the general student population on many dimensions:

- Residential behavioral treatment settings included a disproportionate number of adolescents of color and adolescents from single-parent homes.
- Adolescents in residential behavioral treatment were more than twice as likely as students in public schools to have witnessed physical violence within their homes, and 3 times more likely to be victims of physical abuse. Almost one-half of all adolescents in residential behavioral treatment had been the victim or witness of family violence.
- Adolescents in residential behavioral treatment were more than 3 times more likely than public school students to be victims of sexual violence. One-half of all females in residential behavioral treatment had been victims of sexual abuse.
- Familial rates of alcohol and drug abuse were more than 2½ times higher among adolescents in residential behavioral treatment than among students in public schools.
- Adolescents in residential behavioral treatment were about 2½ times more likely than students in public schools to report psychological distress, more than 3 times more likely to have attempted suicide, and 2 times more likely to report deliberate self-injury.

## Summary of findings

- The rate of sexual activity among adolescents in residential behavioral treatment was more than twice as high as the rate among public school students. Twenty-two percent of the females in residential behavioral treatment had been pregnant and 16% of the males had gotten a sexual partner pregnant. Despite high rates of previous pregnancies and sexually transmitted diseases, many adolescents in residential behavioral treatment did not use condoms or other protection during recent sexual intercourse.
- Many more adolescents in residential behavioral treatment have had special classes for learning problems than public school students. One-half of adolescents in residential behavioral treatment have been placed in special classes.
- Almost half of adolescents in residential behavioral treatment reported engaging in antisocial acts such as vandalism, fighting, and shoplifting at least 3 times in the past year. Of greater concern were the percentages of adolescents in residential behavioral treatment who reported being involved with gangs and carrying weapons to school. More than one-quarter of the adolescents in residential behavioral treatment reported some involvement in a gang, and approximately one-quarter of both females and males had carried a weapon to school.
- Substance abuse rates were greatly elevated among adolescents in residential behavioral treatment. They were 5½ times more likely to be heavy cigarette smokers, and 3 to 5 times more likely than students to use drugs such as LSD, opiates, and cocaine. Adolescents in residential behavioral treatment also reported more harmful consequences of their substance abuse such as damaged relationships and violent behavior. Almost half used substances before or during school.

Behavior problems are obviously the catalyst for residential behavioral treatment placements. The survey does not address the specific actions which resulted in placement, so it likely underestimates the true extent of differences between the residential behavioral treatment population and the student population in terms of behavior problems, emotional distress, and mental disorders. The Minnesota Student Survey was initially developed for use in public schools; therefore, the survey did not assess severe mental or behavioral disorders. However, it is not merely the differences in psychological problems and emotional distress between adolescents in residential behavioral treatment and public school students which are striking. What may be unexpected are the very high rates of sexual activity and substance abuse which accompany the emotional distress and psychological problems among adolescents in residential behavioral treatment. Moreover, many of these youth have encountered a great deal of trauma in their environments, especially physical and sexual abuse.

The profile of adolescents in residential behavioral treatment facilities depicts vividly the constellation of family and environmental risk factors, and problem behaviors or psychological distress among adolescents. Family risk factors included violence, sexual abuse, and parental substance abuse. Environmental risk factors included sexual abuse outside the home, date rape, and date violence. Adolescent problem behavior included substance abuse and other antisocial or violent behavior, high-risk sexual behavior, deliberate self-injury, and suicide attempts. Psychological distress included low self-esteem and emotional distress such as depression and anxiety.

Family risk factors were often interrelated, with many adolescents reporting more than one of these risk factors. The same was true of environmental risk factors. Adolescents' risk behaviors were also associated with one another and with psychological distress, meaning that reports of any particular behavioral or psychological problem was associated with an increased likelihood of other problems. The family and environmental risk factors were also significantly associated with the adolescent's behavior and psychological problems.

The meaningful relationships between risk factors and adolescent problems found in the survey of the residential behavioral treatment population are not only consistent with earlier survey findings of adolescents in public schools,<sup>6-8</sup> they are also consistent with clinical research and other epidemiological studies. Family factors have been consistently implicated in adolescent delinquency, substance abuse, and mental health problems.<sup>9-11</sup> Poor parent-child relationships, neglect, lack of warmth and affection, and inconsistent discipline have been found to be related to low self-esteem, depression, and substance abuse among adolescents.<sup>12-15</sup>

Childhood sexual abuse consistently has been found to be associated with low self-esteem, anxiety and depression, self-injury, and suicide attempts.<sup>16-22</sup> Sexual abuse often leads to anger, hostility, distrust of others, and the inability to establish intimacy, particularly when the abuser was a parent or trusted caregiver, causing serious problems in interpersonal relationships.<sup>16,18,21</sup> Sexual abuse leads to overt behavioral problems as well, including truancy and other school problems, delinquency, running away, prostitution, and substance abuse.<sup>11,19,22-26</sup> Childhood physical abuse is similarly associated with a range of negative effects including aggressive and violent behavior, low self-esteem, difficulty in establishing relationships, self-destructive behaviors, and psychiatric illness.<sup>11,19,27</sup> Witnessing family violence may have similar negative outcomes.<sup>28</sup>

The relationships among the variety of risk factors and problem behaviors examined in the survey of residential behavioral treatment are complex. For example, sexual and physical abuse can lead to repeated victimization when young people who run away from abuse at home become vulnerable to more abuse on the streets. Adolescents may use alcohol and other drugs in an attempt to alleviate the distress associated with abusive experiences, but substance abuse may in fact increase their exposure to the risk of rape and violence. Moreover, substance abuse often worsens feelings of depression and anxiety, and is associated with suicide attempts among adolescents.<sup>8,24</sup> Sometimes substance abuse is an attempt to deal with social alienation, but substance abuse may exacerbate the very problem it is intended to solve when it further disrupts family relationships and friendships.

The fact that so many adolescent problems are interrelated and the reality that many are associated with family problems suggests that solutions will require concerted and collaborative efforts. Many of the adolescents in residential behavioral treatment emerge from a social milieu replete with violence and despair. Individual families and society as a whole must make a renewed commitment to children. Young people need to be reared in an environment where they are protected, respected, and valued, in order that they learn to value themselves, respect their needs and the needs of others, and adopt healthy and responsible behaviors.<sup>7</sup>

# Recommendations

The results of the Minnesota Student Survey of adolescents in residential behavioral treatment have implications for averting residential behavioral treatment placements. Clearly, earlier detection and effective interventions for children and families traumatized by physical and sexual abuse are essential. Improved access to professional assessments and services, for all families without limits imposed by financial resources, also would help to reduce the likelihood of serious behavioral problems among youth. Collaborative efforts now underway between county social service agencies, community mental health centers, and schools are an important step in this direction.

Survey results also suggest improvements to services for adolescents in residential behavioral treatment which may reduce emotional distress and behavioral problems. Specific recommendations include:

- Extensive and intensive therapeutic services for the effects of physical and sexual abuse should be developed or enhanced.
- Referrals for assessments of parental substance abuse and mental health problems should be available as part of the adolescent assessment process in residential behavioral treatment settings.
- Therapeutic services to address responsible sexual behavior should be incorporated or expanded in residential behavioral treatment.
- Substance abuse assessment and treatment needs to be available to all residents of behavioral treatment facilities, with continuity of care posttreatment.
- Therapeutic services should involve youth in identifying the perceived benefits of gang involvement and violent behavior, and developing safer and healthier alternatives.
- Ensure that all services for adolescents in residential behavioral treatment are sensitive and responsive to diverse cultural backgrounds and differing developmental needs of males and females.



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