

130062

**U.S. Department of Justice
National Institute of Justice**

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this ~~copyrighted~~ material has been granted by

Public Domain/OJP/NIJ
U.S. Department of Justice

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the ~~copyright~~ owner.



NATIONAL INSTITUTE OF JUSTICE

NCJRS International Summaries

Charles B. DeWitt, Director

August 1991

Who Become Drug Abusers?

by Arthur Solarz

In Sweden and throughout the international justice community, interest has grown for a stronger criminal policy against narcotics abuse. Proposed strategies emphasize fighting the organized sale and distribution of narcotics. Worldwide enforcement policies target:

- Suppressing illegal production and distribution.
- Restraining the consumer marketplace.
- Initiating and implementing different strategies based on the harmfulness of the narcotic substance.

Generally, controls among nations are levied through the severity of penal sanctions; however, these vary from country to country. For example, in Turkey, possession of narcotics is punishable by 3 to 5 years' imprisonment. In Indonesia, marijuana possession brings 2 years in prison while narcotics possession results in 3 years. In Japan, depending on the narcotic, prison terms can be as long as 10 years.

From Sweden

This summary was adapted from *"Who Become Drug Abusers? Drugs, Criminality, and Control,"* published by the Swedish Crime Prevention Council, NCJ 130528.

Methodology

This report explores the question: "Who become drug abusers?" To help answer this question, researchers analyzed data on 50,465 conscriptees of the Swedish military in 1969 and 1970.

The study follows these individuals to 1985 and examines factors that may relate to drug and alcohol use in later life. Most of the study's subjects were born between 1949 and 1951. Information collected through extensive interviews and medical and psychological tests was used to develop 200 variables that characterize conscriptees' home lives, school experiences, extracurricular activities, personal characteristics, and drug use. Data were gathered on subjects' criminal histories (from 1966 to 1985) and on sick leave, employment experiences, absences from work, reported illnesses, and deaths (from 1970 to 1985).

Data were analyzed using logistic regression and two-dimensional primary analyses to establish the relative risk factors for narcotics and drug abuse.

In terms of drug use, subjects were initially categorized into these groups:

- Never used narcotics (81.9 percent).
- Used narcotics once (3.9 percent).

- Used narcotics up to four times (3.2 percent).
- Used narcotics 5 to 10 times (1.8 percent).
- Used narcotics 11 to 50 times (1.8 percent).
- Used narcotics more than 50 times or injected drugs (2 percent).
- Did not provide information about narcotic drug use (5.4 percent).

Of significance from these findings is that 2 percent, or 1,007 subjects, had used drugs more than 50 times or had injected drugs. These subjects were considered the advanced or intensive users. The majority of the conscriptees, about 80 percent, claimed to have never used narcotics. The remaining 20 percent had taken the following types of drugs:

- Cannabis (80.0 percent).
- Barbiturates (8.6 percent).
- Amphetamines (4.0 percent).
- LSD (3.7 percent).
- Opiates (2.6 percent).

Smoking was the most common mode of drug ingestion; just 3 percent of the subjects had injected drugs.

Findings

The following discussion examines groups of variables assembled from subjects' responses to interview and test questions. It also examined the correlation between these variables and the subjects' drug use. For ease of analysis, two of the seven subject groups identified in the section on methodology were merged to form the following groups:

- Never used drugs.
- Used drugs once.
- Used drugs occasionally (1 to 10 times).
- Used drugs often (11 to 50 times).
- Used drugs heavily (more than 50 times) or injected drugs.

The influence of the subject's home life

A number of variables were constructed to define home life and to determine its influence on the development of drug use.

The presence or absence of parents during the subject's growing-up years was significantly related to the risk of drug use. If one or both parents were deceased or sick, no significant correlation with drug use was indicated. However, subjects whose parents were divorced or whose fathers had alcohol abuse problems (not present emotionally for the child) were significantly more likely to become drug users. These subjects were much more likely to fall into the group with the most intense drug habits.

Subjects who grew up within an intact family were the least likely to become drug abusers. For subjects who grew up with someone other than a parent, the risk of developing an advanced drug habit was three times greater than that of a child who had grown up in an intact family. Similar risk factors occurred for children who had grown up in divorce situations.

Both very lenient and very strict upbringing correlated significantly with drug abuse, although the former showed the strongest relationship. A history of running away from home also correlated with drug abuse.

A father's use of alcohol and/or drugs put a child at greater risk for drug abuse. However, the correlation between a father's alcohol use and his son's is higher than between a father's drug use and his son's.

Family income significantly influenced the level of narcotics use. The heaviest abusers grew up in the poorest, most crowded conditions.

The subjects' relationship with parents was measured by these variables:

- Amount of honor and respect for parents.
- Tendency to share personal problems with mother, father, or both.
- Frequency of enjoying leisure activities with parents.
- Level of strictness or leniency in upbringing.
- Frequency and severity of physical beatings.
- Ability to thrive at home.
- Other home circumstances.
- Frequency of running away from home.

Analysis of the data indicated that negative family relations, a lack of thriving at home, and poor relations with parents during early childhood years induce later drug use.

Education, work, and leisure

This study also looked at the correlation between the use of narcotics and the quality of time spent at school, work, and leisure. Different variables were examined among these three life components.

Education and school experiences. The education levels of the subjects had no significant correlation with drug abuse. However, school experiences had a strong influence. The following education-related variables had strong correlations with drug use:

- Frequency of truancy.
- Grades or level of academic success.
- Amount of cooperation with teachers.
- Level of acceptance by peers.
- Perceived approval from classmates.

- Counseling opportunities.
- Amount of monitoring and attention from teachers.
- Ability to thrive at school.

For one-time or occasional drug users, school experiences were generally positive.

Subjects with advanced narcotics habits were many more times likely than the average subject to have had poor adaptation and a history of school trouble. School-related variables correlating to drug abuse included feelings of having been treated unfairly, a history of truancy, a declining grade point average, and removal from school because of stress. Students who had attended special classes were also more likely to have advanced narcotics habits.

Relationships between home and school.

Results indicated that home environment influenced success in school. In turn, coping in school influenced the quality of peer relationships and, to some extent, sensitivity to drug use.

Subjects showed a strong tendency to become drug users if they had difficulties being prepared for school. This lack of preparation caused them to do poorly in school, feel that they had been treated unfairly, and dislike school work.

Occupation and work experiences. The study also examined the relationship between adaptation in the workplace and drug abuse. Successful workplace adaptation correlated with subjects who had used drugs only once or occasionally. However, persons with high drug abuse and an advanced use of narcotics were 27 times more likely to have difficulties at work. Subjects who had not obtained a job within 3 months after finishing school were four times more likely to be in the advanced drug abuse group than in the occasional drug abuse group. Persons who quit a job claiming unfair treatment by the employer or supervisor were 12 times more likely to fall in the advanced drug use group than the occasional drug use group, and those having conflicts with their superiors were 7 to 10 times more likely to fall in the advanced drug use group.

Even more compelling was the link between those dismissed from their jobs and drug abuse. These subjects were 17 times more likely to be in the advanced drug use group than were persons who had not been fired.

Overall, results indicated that persons who have difficulty adapting in the workplace are at great risk of becoming heavy drug users.

The study revealed a correlation between the types of occupations and the tendency to drug abuse. Those subjects employed in mining and quarry occupations were the heaviest drug abusers. Those employed in agriculture, forestry, and fishing were the least likely to use drugs. Administrative or other office workers were the most likely to use drugs once or occasionally.

Organization memberships. Self-reported data on volunteerism or activity for charitable organizations, idealistic organizations, or political parties, and involvement with sports clubs were analyzed against the frequency of drug use, as were data on religious and moral beliefs. Results showed that subjects who were members of a charitable or idealistic organization were more likely to fall into the groups having no or occasional drug use. Those who belonged to sports clubs or to political parties were likely to belong to the group that only used drugs once. The group that had used drugs 11 to 50 times had about twice as many people who did not participate in sports clubs or political parties, and the advanced drug use group had about 4 times as many people who did not participate in such activities.

Other types of club memberships showed no correlation, positive or negative, to narcotics use. However, persons who were club members generally had used drugs once, but those with heavy drug use habits tended not to belong to any clubs or organizations.

Leisure time activities. Subjects who had few leisure activities or who were unable to cope with free time ran a greater risk (18 times the average) of developing advanced narcotics habits. This was not true of the

occasional users, who showed good or very good coping skills in this area. Problems coping with leisure time were more closely linked to narcotics use than to alcohol use.

Size of city/town of residence and type of housing during the growing-up years

As youths, about 12 percent of the study population lived in Stockholm; about 47 percent lived in cities of more than 50,000; about 15 percent lived in small towns; and about 25 percent lived in rural areas. The residences of one-time drug users varied widely. However, heavy drug users were far more likely to live in large cities (Stockholm, Göteborg, or Malmö) than in smaller cities or rural areas. The number of moves from city to city did not correlate with drug use.

Self-reported early criminality

The study revealed a strong correlation between criminality and drug abuse.

Petty theft. Of the 50,465 subjects, 2.2 percent admitted to having committed petty theft more than once, and 30.5 percent admitted to a single petty theft. Of those who had committed petty theft multiple times, 17.8 percent had advanced narcotic habits compared with 3.1 percent of those who committed petty theft only once and with 0.7 percent of those who had never stolen. Those who reported committing petty theft once were 2.5 times more often among the occasional narcotics users than those who had never stolen; they were 3.3 times as often among those who used narcotics many times and 4.4 times as often among those who reported advanced use. Therefore, the likelihood of subjects having committed theft increases up to 25.4 times for advanced narcotics users.

Contact with police or juvenile authorities. Those subjects who had come into contact with police or juvenile authorities were represented 22 times more in the high drug use group than those not using narcotics frequently.

Personal characteristics and psychological aspects

The subjects took part in medical and psychological examinations. These included written tests, comprehensive interviews, and other tests to determine coping abilities concerning school, home, work, and leisure activities.

Those displaying the poorest ability to cope in these areas were found among the most advanced drug users.

Talents/abilities

Tests were administered to subjects to measure their abilities in the following areas:

- Verbal.
- Logic.
- Spatial.
- Technical.

Analysis showed that those subjects with the highest test scores appeared most often among the group of occasional narcotics users. This is especially true of the highest scores for verbal, logic, and technical abilities. This can be interpreted to mean that the more intellectually developed subjects are able to control their narcotics-use habits, perhaps discontinuing drug use before serious problems occur. The lowest scores appeared in the group whose narcotics use was advanced.

Emotional stability. Emotional stability is defined mainly as the maturity to tolerate psychological stress. A lack of emotional stability was linked with the group with advanced drug use.

Emotional control. Emotional control is defined as the ability to:

- Tolerate stress.
- Cope with anxiety.
- Control nervousness.
- Channel aggression.
- Engage in emotional relationships.

Those with the least amount of emotional control made up the group with the most advanced narcotics use.

Social maturity. Social maturity is defined as possessing the qualities of independent and responsible behavior. Criminality and other forms of social adaptation were also considered. Low social maturity levels were classified as the following behaviors:

- Infantile.
- Dependent.
- Dependent on adults and friends and unwilling to take responsibility.
- Dominated in the workplace, among friends, and in other contexts.

Those who showed the most social maturity were found more often among one-time drug users. Those with the lowest social maturity were the most strongly represented in the most intensive narcotics use group.

Interests

A subject's personal interests are manifested in his activities. High activity levels indicate broad interests. For the study, interests included work, leisure, and professional activities. Categories were numbered from one to five. Categories one and two indicated persons with few activities, or interests in passive activities such as household tasks, art, and business. Categories four and five indicated interests of a more aggressive type, such as sports, mechanics, hunting, fishing, and hiking. Those persons with more passive activities were over-represented among narcotics users. Persons with few interests were represented 33 times more often in the 2 most intensive narcotics user groups than in the other groups.

Psychic energy. Psychic energy is defined mainly as being willing to take initiative, possessing the maturity to take on a number of activities simultaneously, and following through.

Those subjects with low psychic energy correlated strongly with the most frequent users of narcotics. For one-time users, the correlation was insignificant.

Psychic functioning. The psychic functioning variable combined the characteristics of social maturity, interests, psychic energy, home life, emotional control, and other psychological information gathered in the interviews. The degree of psychic functioning had a strong correlation with the intensity of narcotics consumption. This is most clearly apparent among the high use and advanced use groups, where about 60 times the number of subjects in these groups appear in the low psychic-functioning levels compared to the subjects in the no use and low use groups.

Psychiatric commitments. Overall, 11.9 percent of the subjects had been committed for psychiatric treatment. The number of subjects committed for psychiatric treatment in the one-time or occasional drug use groups were not represented in higher than average proportions. However, a strong correlation existed between advanced narcotics use and psychiatric commitments.

Personal characteristics. The study analyzed the previously examined variables and their data to differentiate the personal characteristics of members of the study groups. Many correlations were found. Listed are the findings:

- Subjects characterized as the most intellectually gifted appeared most often among those who used drugs occasionally.
- Frequent drug abusers were found to experience the following:
 - A poor ability to tolerate psychic frustrations (37 times as many subjects developed advanced drug use than those showing good emotional stability).
 - Anxiety, difficulty in channeling nervousness and aggressiveness, and low stress tolerance.
 - Difficulty engaging in emotionally satisfying relationships and taking initiative.
 - Frustration in the face of complications and difficulties.
 - Interest in quiet, passive activities.

- Documented psychosomatic symptoms.
- Physical ailments such as headaches, sleep problems, stomach pains, and nervousness.

Those who were nervous and restless also ran the risk of being drug abusers or alcohol abusers. Depression was the most significant variable in this group.

Certain variables only correlated with alcohol use or with narcotics use. Subjects with no or few interests were characterized as advanced narcotics users but only sometimes as alcohol abusers or alcohol dependents. Depression was an important indicator of narcotics use (even occasional), but relatively weak for alcohol use.

Other drug use

The study also examined the correlation between the use of other drugs and drug/alcohol abuse.

Tobacco. Tobacco smoking was common among young people in 1970; 60 percent of the subjects smoked 1 to 20 cigarettes daily. The study found a strong correlation between tobacco use and narcotic drug use. Heavy smokers were 20 times more likely to be among heavy narcotics users than were nonsmokers. Also, the largest number of tobacco smokers were found in the group of heavy narcotics users (89.2 percent) as compared with the group who used drugs 11 to 50 times (82.1 percent) and those who used drugs 1 to 10 times (79.1 percent).

Inhalant. Sniffing paint thinner and similar substances was a common method of drug abuse among young teens. A strong correlation was found between sniffing drugs and the later use of narcotics. About 13 percent of the study population had sniffed substances. More than half of these (7.3 percent of the total population) had tried drugs only once, and 4 percent had experimented with drugs 2 to 10 times. Sniffing substances as a child has a stronger correlation with advanced narcotics use than with occasional use. The group that sniffed substances more than 10 times appeared more often among heavy drug users than in the other user groups.

Summary

The study indicated that a number of variables, or groups of variables, indicated an individual's risk of becoming a drug user. Other variables showed little or no correlation. A summary listing follows:

Variable	Correlation to drug use
<ul style="list-style-type: none"> • Parents were deceased. • Parents were divorced. • One or both parents were ill. • Father used alcohol. • Very strict or very lenient upbringing. • History of running away from home. • Raised by someone other than own parents. • From very low income bracket. 	<ul style="list-style-type: none"> • No correlation. • Significant correlation. • Significant correlation, but lower than that of divorced parents. • Five times greater risk of becoming a drug user. • High correlation. • Twice as likely to develop alcohol problems. • Very strong correlation. • Twice as likely as those in other income brackets to develop drug problems, especially alcohol. • Eight times the risk of developing an alcohol problem. • No correlation. • 25 times as likely to develop drug problems. • Two to three times as likely to develop an alcohol habit. • 18 times as likely to develop an alcohol habit. • 1.5 to 2.7 times more likely to develop an alcohol problem. • High correlation. • Significant correlation to narcotics and alcohol abuse. • Significant correlation to narcotics and alcohol abuse. • 7 to 22 times the risk to develop a drug or alcohol problem than subjects with single incidents of criminality.
<ul style="list-style-type: none"> • Did not thrive in home environment while growing up. • Had siblings. • Lived within difficult home circumstances. • Assigned to remedial classes in school. • Truant from school more than once a week. • Unemployed for more than 3 months. • Adjusted poorly at work. • Smoked more than 20 cigarettes daily. • Sniffed substances more than 10 times. • Committed many crimes (self-reported). 	

Alcohol. To test the correlation between alcohol use and narcotics use, the study used the following schedule of variables to indicate the degree of alcohol use:

- Frequency of intoxication.
- Number of hangovers.
- Number of drunk driving incidents.
- Frequency of obtaining a pick-me-up as a cure for a hangover.

The analysis shows that persons who are often drunk are greatly overrepresented among all groups of narcotics users, regardless of intensity of drug use.

Implications

Drug abuse is a complex social phenomenon with medical, pharmacologic, psychological, sociological, and criminological aspects. The question "Who become drug

abusers?" has a bearing on studies about the relationship between drug abuse and criminal behavior and on the analysis of drug control strategies. While it is common practice to study selected groups of drug abusers, such as intravenous drug users, heroin addicts, or criminals, this study instead examines the general population of Sweden. The results show that certain factors appear to be related to drug abuse:

- The use of drugs such as tobacco and alcohol.
- Early criminal behavior.
- Parental drug habits.
- Poor school and home relations.
- Difficult family structure.
- Negative personal characteristics.
- Leisure activities.

Society's reaction to the abuse of alcohol and narcotic drugs cannot be isolated from the socialization processes of the home, family, or school. Early preventive measures are necessary: instruction about drugs should be integrated into an expanded school curriculum, parents should be taught which forms of negative behavior can develop in their children, and young adults should be instructed on how to effectively cope with crisis situations. These kinds of responses would have greater long term effects than knowledge transmitted through temporary public campaigns against drug abuse.

The Assistant Attorney General, Office of Justice Programs, establishes the policies and priorities, and manages and coordinates the activities of the Bureau of Justice Assistance, Bureau of Justice Statistics, National Institute of Justice, Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.

NCJ 130062