

The Drug-of-Choice Phenomenon: Why Addicts Start Using Their Preferred Drug

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Abstract — The reasons why addicts begin using their preferred drug are examined and compared for differences between groups. Utilizing a questionnaire regarding their drug of choice and their reasons for use, a survey was made of 130 subjects (88 men and 42 women; mean age=34.3 years) who were actively involved in recovery programs. The most frequent period of abstinence from the use of alcohol and other drugs was between one and two years. Forty-five of the subjects preferred opioids, 27 amphetamines, 24 cocaine, 18 marijuana, and 16 alcohol. The reasons for use were separated into three categories: emotional, physical, and social. Results showed that the amphetamine and cocaine addicts selected a higher number of physical reasons for use, and that the alcohol group chose social reasons most frequently. There were no differences between drug groups in total number of emotional reasons selected. Specific reasons for use were also analyzed between drug-of-choice groups. The findings cast doubt on earlier studies that suggested differential psychopathology or emotional disorders among addicts with different drugs of choice. Clinical implications of these data are discussed.

Keywords — addiction, drug of choice, personality, psychopathology

Personality differences associated with an addict's preferred drug are often talked about among addicts in the drug culture and in the recovery movement. Being a speed freak or stimulant addict has a connotation that differs from that of the dope fiend or opioid addict. Jokes are told about the slick dope fiend, the guilty and depressed alcoholic, and the paranoid speed freak. It is understood among addicts that the preference for a specific drug reflects some basic personality and/or behavioral differences. In the scientific community there has also been discussion of the drug-of-choice phenomenon, suggesting that it mirrors differing psychopathologies and personal styles of defense rather than differing personalities per se. It has become common to talk about addicts using their preferred drugs in an effort to self-medicate undiagnosed

psychopathology that existed prior to the existence of the addiction.

Prior investigations have attempted to relate the drug-of-choice phenomenon to psychopathology or personality as seen in very early abstinence. For example, Pittel (1971) compared psychedelic drug users with heroin users, and found that while they had similar patterns of pathologies on the MMPI, the heroin addicts showed slightly greater pathology, particularly among the female subjects. In a comparison of heroin and amphetamine addicts, Milkman and Frosch (1973: 242) found heroin addicts to have "low self-esteem and a personalized style," whereas amphetamine addicts exhibited "narcissistic self-inflation and abstract communication." They also reported that heroin addicts functioned at lower levels in most ego functions than amphetamine addicts, and that both were less functional than normal subjects. In a comparative study of opioid, amphetamine, and psychodepressant addicts, McLellan, Woody and O'Brien (1979) found that each group developed different psychopathologies over a six-year period. These authors suggested that this might reflect different

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preaddiction personality disorders, despite the fact that no differences existed between the groups when the subjects were first tested. In studies conducted via clinical interviews and observations, Khantzian (1985: 1263) concluded that "addicts are attempting to medicate themselves for a range of psychiatric problems and painful emotional states." Without directly referring to personality *per se*, Khantzian implied that addicts prefer specific drugs because of pathological personality features. He stated (p. 1259) that "narcotic addicts prefer opiates because of their powerful muting action on the disorganizing and threatening affects of rage and aggression. Cocaine has its appeal because of its ability to relieve distress associated with depression, hypomania, and hyperactivity."

In most of these studies the subjects were individuals who were in the process of coming off drugs and in the first few weeks of abstinence. Therefore, it is unclear if the results obtained were due to the pharmacological effects of the differing drugs of choice, the effects of drug withdrawal, the sociological and economic effects of long-term abuse of specific drugs and/or possible personality, social or psychopathological differences that might have existed prior to the addiction. The impact of drugs themselves on developing pathology seems likely in view of the results of McLellan, Woody and O'Brien's study in which the subjects had no initial differences early in their addiction careers, but went on to have large differences after six more years of using. The authors said this may have been the result of preaddiction differences; however, the study seemed to suggest that personality differences and psychopathology seen in early abstinence are the result of the drug addiction rather than precipitating factors. Clinical experience supports this: for clinicians working in psychiatric emergency settings, it is common knowledge that long-term use of stimulants leads to psychotic symptoms and paranoid behavior.

To control for direct and indirect drug effects in determining predispositions for specific drug use, it is necessary to look at some feature or characteristic of the addicts that was present prior to or early in their drug-using careers. Standardized personality inventories are not amenable to retrospective study. For example, one cannot ask subjects to respond to an MMPI as they would have before they began using drugs. However, subjects are able to report retrospectively on their reasons for use. Presumably, addicts would be attracted to different drugs for different reasons. Moreover, individuals with certain personalities and problems would tend to use drugs that had pharmacological effects that seemingly helped with or mitigated those problems. An investigation of addicts' initial reasons for use of their drug of choice provides a direct approach to this possible relationship between personality differences, stressors, and drug preference.

Previous studies of reasons for drug use have either

focused on nonaddict populations or have failed to address the drug-of-choice issue (Johnston & O'Malley 1986; Butler, Gunderson & Bruni 1981; Dohner 1972). Dohner, reporting on adult and adolescent drug use, classified the reasons for drug use into broad categories and concluded that people — both those with alcohol or other drug problems and nonaddict students — use drugs in an attempt to deal with ordinary psychological difficulties with an eye to easy and instant relief, the "better living through chemistry" approach to problems. This study did not look at the drug-of-choice issue. Butler, Gunderson and Bruni studied the reasons for use among 867 (male) Navy enlistees involved in drug abuse treatment. Although data were collected about the drug of choice, reference to specific drug type was ignored in the data analysis. Johnston and O'Malley studied the reasons for drug use among high-school students. Reasons for use, grouped into 13 categories, varied considerably according to the specific drug as well as by the amount of involvement with the drug. However, although a group of "heavy users" (used 10 or more times in their lifetime) was distinguished from "experimental users" (used one to two times in their lifetime) and "occasional users" (used three to nine times in their lifetime), an addict or drug dependent subpopulation was not defined. The focus on reasons for drug use in the above studies do not presuppose pathology in the individuals who use drugs, although personality differences may be inferred from reasons for use.

Similarly, the present study was designed to look at recovering addicts' initial reasons for use of their drugs of choice and does not presuppose the presence or absence of pathology at the time drug use began. Since the mid-1960s, large numbers of Americans have had access to a wide range of drugs — both legal and illegal — to use for coping with normal stressors of everyday life. In a drug-permissive society it has been considered quite appropriate to solve problems with fast-acting chemicals. It is possible that those individuals who go on to become addicted to various drugs may be like everyone else in terms of why they were initially using the drugs that attracted them. The reasons for drug use that were found to be important for the nonaddict population may be the same reasons for initial use by those who eventually become addicted. Because people tend to use different drugs for different reasons — due to differing pharmacological effects — addicts with different drugs of choice may have begun using them for different reasons.

The present study utilizes the experiences of addicts who have varying periods of time in recovery. Clinical experience suggests that recovering addicts who are drugfree for several months or more and are actively involved in a recovery program have given a great deal of thought to their experiences and feelings both before and during their drug use. They know why they started using drugs and

they know why they preferred their drug of choice. The sample studied here has a wider range of clean time than addicts in previous studies. The subjects' clean time ranged from 24 hours to 22 years, with the largest number of subjects having between one and two years of abstinence.

The main question to be answered by the present investigation was, Do addicts who prefer one specific drug differ in their original reasons for use from addicts who prefer another? Other questions were also addressed. Subjects were asked about the development of a sequential second drug of choice; the hypothesis being that this second preferred drug is frequently used to decrease the unpleasant effects of other drugs. In addition, subjects were asked about their family history of alcoholism and/or other drug addiction, with the expectation that a positive history would be widespread in this population (Collins 1985).

METHODS

Subjects

Subjects were recovering drug addicts, most ($n=114$) with active involvement in Narcotics Anonymous (NA) and a smaller number ($n=16$) in recovery at Delancey Street Foundation in San Francisco. There were no special characteristics or qualifications other than the self-diagnosis of addiction as defined by the self-selection process of membership in these self-help organizations. Of the 200 questionnaires distributed, there were 170 respondents. Of these, 130 subjects declared a specific drug of choice in a major drug group: 45 preferred opioids; 27 preferred amphetamines; 24 preferred cocaine; 18 preferred marijuana; and 16 preferred alcohol. Data were analyzed for these 130 respondents — 88 men and 42 women, with ages ranging from 17 to 58 ($\mu=34.3$ years). The amount of time in recovery and abstinence from all drugs ranged from one day to 22 years, with the largest group having between one and two years abstinence from drugs (see Table I).

TABLE I

Time Abstinent from Drugs	n
Less than 30 days	9
30 days to 6 months	21
6 to 12 months	12
1 to 2 years	25
2 to 3 years	18
3 to 4 years	17
4 to 5 years	4
More than 5 years	19
No response	5

Materials

The questionnaire used in the present study was adapted from Johnston and O'Malley (1986). Reliability for their measures is discussed in O'Malley, Bachman and Johnston (1983). Their categories were revised based on interviews with a sample of 10 recovering addicts and a preliminary/pilot questionnaire that was handed out to a sample of 20 addicts who were asked to fill it out and comment on it. The final instrument asks one open-ended question about the reasons for use of the drug of choice. It then asks again, using a checklist of reasons subdivided into three specific areas: emotional, physical, and social. The questionnaire also asks about a sequential second drug of choice. Moreover, it asks for demographic information, and for personal as well as family alcohol and other drug abuse history.

Procedure

Questionnaires were distributed to people exiting a dance at the 10th Annual Northern California Convention of Narcotics Anonymous, which was held in Oakland, California. The investigator stood in an area immediately outside of the dance area and asked every person who walked by if they would like to participate in a research study. Those who were interested were given a questionnaire and a pen, filling out the questionnaire at nearby tables. Over several days, more questionnaires were distributed outside of a well-known NA meeting center in San Francisco, during a 20-minute period before the beginning of meetings. Again, everyone who came in was asked if they would like to participate in the study, and those who were interested filled out the questionnaire at that time. Finally, a smaller number questionnaires were distributed to residents at the Delancey Street Foundation who had spent a year or more there. The data from these questionnaires were then coded and analyzed.

RESULTS

General Reasons for Use

One-factor ANOVAs compared the five drug-of-choice groups on the total number of positive responses given to each general category of reasons for use — emotional, physical, and social (see Table II). For the emotional reasons, totals could range from 0 to 12, for physical reasons 0 to 7, and for social reasons 0 to 5. Overall, ANOVAs were significant for the physical and social categories. However, no significant differences were found for the emotional category.

Analytical comparisons found that the amphetamine and cocaine groups had a significantly higher number of physical reasons than did the other three groups. These two groups did not differ from each other, nor did the remaining three groups (opioids, marijuana, and alcohol)

TABLE II
GENERAL REASONS FOR USE OF DRUG OF CHOICE

	Emotional		Physical		Social	
	μ	σ	μ	σ	μ	σ
Opioid (n=45)	4.13	2.88	.96	1.21	2.11	1.35
Amphetamine (n=27)	4.59	3.25	2.37	1.52	2.33	1.69
Cocaine (n=24)	5.17	3.63	1.79	1.79	2.75	1.57
Marijuana (n=18)	3.67	2.54	.33	.49	2.22	1.41
Alcohol (n=16)	4.94	3.15	.63	.89	3.31	1.08
	$F=.84$		$F=9.66^*$		$F=2.45^{**}$	

* $p<.01$ ** $p<.05$

TABLE III
DIFFERENT REASONS FOR USE OF DRUG OF CHOICE*

	Opioids n=45	Amphetamine n=27	Cocaine n=24	Marijuana n=18	Alcohol n=16
Emotional Reasons					
Boredom, nothing else to do	22.2	48.1	45.8	22.2	43.8
Get away from problems	26.6	48.1	58.3	33.3	37.5
To feel good, get high	91.1	74.1	95.8	88.8	100.0
To relax, to relieve tension	48.9	22.2	50.0	33.3	37.5
To relieve restlessness	22.2	22.2	25.0	11.1	25.0
Feel less self-conscious	48.9	48.1	50.0	44.4	87.5
Because of anger	24.4	29.6	33.3	16.6	12.5
Because of frustration	28.9	37.0	37.5	16.6	18.7
Because of depression	35.5	44.4	33.3	50.0	37.5
Because of feeling guilty	22.2	22.2	20.8	22.2	37.5
Because of anxiety	28.9	22.2	33.3	16.6	56.3
To help you concentrate	13.3	23.4	25.0	11.1	—
Physical Reasons					
Decrease effects of other drug	17.8	18.5	12.5	5.6	6.3
To get to sleep	13.3	7.4	20.8	11.1	12.5
To stay awake	6.7	59.3	50.0	—	6.3
To get more energy	26.7	77.7	54.2	5.6	18.8
To lose weight	—	48.1	16.7	5.6	—
For a sexual problem	8.9	14.8	12.5	5.6	18.8
To relieve physical pain	22.2	11.1	12.5	—	—
Social Reasons					
Impress, "keep" friend or partner	20.0	18.5	29.2	22.2	12.5
Feel less shy at parties	26.6	37.0	37.5	33.3	93.8
Have a good time with friends	57.8	55.5	75.0	50.0	100.0
Fit in with a group that you liked	37.8	55.5	62.5	77.8	56.3
Experiment, see what it was like	73.3	66.6	70.8	88.9	68.8

*The above figures represent the percentages of each drug group that selected each reason.

TABLE IV

Specific Reasons for Use of Drug of Choice	χ^2
To stay awake	42.4*
To lose weight	37.6*
To get more energy	33.6*
To feel less shy at parties	23.1*
To help you concentrate	14.1*
To have a good time with friends	13.5*
To feel good, get high	9.6*
To fit in with a group that you liked	9.6*
To relieve physical pain	8.9
To feel less self-conscious	8.8
Because of boredom, nothing else to do	8.1
To get away from some problems	7.8
Because of anxiety	7.7
To relax, to relieve tension	6.4
Because of frustration	3.8
To experiment and see what it was like	3.7
Because of anger	3.2
To decrease the effects of other drug	2.9
To get to sleep	2.1
To help with a sexual problem	2.1
Because of feeling guilty	1.9
To impress or "keep" a friend	1.8
Because of depression	1.8
To relieve restlessness	1.5

* $p < .05$; $df = 4$

differ significantly from one another. These comparisons also found that the alcohol group indicated significantly more social reasons for use than the opioid and amphetamine groups, but not significantly more than the cocaine or marijuana groups; the nonalcohol groups did not differ significantly in social reasons.

Specific Reasons

Table III presents the percentage of respondents from each drug-of-choice group for each specific reason for use. Reasons for use are subdivided into emotional, physical, and social categories.

For each reason, a χ^2 was calculated from 2×5 contingency tables (i.e., yes or no \times drug of choice). All of the specific reasons to use the drug of choice are shown in Table IV and arranged in order from highest to lowest χ^2 value. Eight of the 24 reasons were significant at the .05 level: three from the physical reasons category, three from the social, and two from the emotional.

The largest significant difference between the groups was found for three physical reasons: to stay awake, to lose weight, and to get more energy. Analytic comparisons of partitioned contingency tables showed that these were selected most frequently by the amphetamine group, and secondarily by the cocaine group. Amphetamine addicts selected "to help you concentrate" significantly more often

than the opioid, marijuana, and alcohol groups, while cocaine addicts selected this reason significantly more often than did the alcohol group.

On partitioned contingency tables, χ^2 analysis also showed that the alcohol group selected "to feel less shy at parties" significantly more than all other groups, and "to have a good time with friends" significantly more than all other groups, except the cocaine group. One hundred percent of the alcohol group selected "have a good time with friends" and "to feel good, get high." The marijuana and cocaine groups selected "to fit in with a group that you like" significantly more often than did the opioid group.

Other Analyses

The reason "to decrease the effects of other drugs" was not frequently selected for the initial drug of choice; however, it was much more prevalent as a reason selected when discussing the sequential second drug of choice. For the first drug of choice, 12.14% of all respondents selected this reason; it was selected by 33% of the total cases for the second drug of choice.

A χ^2 analysis found no significant gender differences between the drug-of-choice groups: $\chi^2(4) = .545$, $p = .97$. A one-factor ANOVA showed no significant age differences between the drug-of-choice groups, $F(4,125) = 1.86$, $p = .122$.

The mean clean time for the sample was 28.38 months. Although the drug-of-choice groups differed in period of abstinence from drugs, the shortest mean abstinence time (the cocaine group) was slightly over a year. A one-factor ANOVA indicated significant differences in clean time among the drug-of-choice groups, $F(4,120) = 3.76$, $p < .01$. The alcohol group ($\mu = 56.06$, $\sigma = 68.94$) had a significantly longer clean time than the opioid group ($\mu = 27.63$, $\sigma = 29.67$), the amphetamine group ($\mu = 26.41$, $\sigma = 24.35$), and the cocaine group ($\mu = 13.38$, $\sigma = 15.64$). The marijuana group ($\mu = 39.50$, $\sigma = 36.16$) had a significantly longer clean time than the cocaine group.

The mean age at which subjects in the survey began using their drug-of-choice was 17.21 years. A one-factor ANOVA found significant differences in age of first use according to drug-of-choice, $F(4,121) = 3.11$, $p < .05$, with the alcohol group ($\mu = 13.5$, $\sigma = 2.07$) using sooner than the opioid group ($\mu = 18.05$, $\sigma = 3.99$), the amphetamine group ($\mu = 18.0$, $\sigma = 6.58$), and the cocaine group ($\mu = 18.79$, $\sigma = 8.56$). The marijuana group ($\mu = 15.12$, $\sigma = 4.86$) differed significantly from the cocaine group.

CONCLUSION

Perhaps the most interesting finding in the present study was a nonfinding: the drug-of-choice groups did not differ significantly from one another on the number of emotional reasons for initial drug use. Furthermore, only

two of the specific emotional reasons — “to feel good, get high” and “to help you concentrate” — differed by drug-of-choice group. Table III shows that the significance on the first item — “to feel good, get high” — results from the 100% positive responses given by the alcohol group. Over 90% of subjects from all drug-of-choice groups gave a positive response on this item. Also, the significance on the “concentration” item was the result of the zero percent positive response by the alcohol group. One could reasonably question whether the concentration item would best be categorized as a physical reason.

Considering that previous research suggested differential pathology among different drug-of-choice groups, these results are important. Psychopathology is generally viewed as an emotional disorder, and different psychopathologies are characterized by different configurations of emotions. Yet none of the emotions typically associated with pathological disturbances — guilt, anxiety, depression, anger, and self-consciousness — differentiated the drug-of-choice groups. This finding lends support to the concern expressed earlier that psychopathology could be the result, and not the cause, of prolonged drug abuse. Cocaine and amphetamine addicts may have to deal with withdrawal-induced depression for months or even a year after they stop using. Furthermore, amphetamine and cocaine addicts may experience paranoia and psychoticlike symptoms as their addiction progresses (Inaba & Cohen 1989), and alcohol and other psychodepressant drugs can cause depression, panic and/or anxiety, which may persist in varying degrees long into recovery.

As noted above, previous studies have examined addicts within the first few weeks of recovery. The results of the present study, combined with the findings of McLellan, Woody and O'Brien (1979), suggest that these previous studies, to the extent that they infer preexisting pathologies or emotional differences between addicts who select different drugs of choice, may suffer from the confounding influence of the consequences of the drug use itself. Vaillant's longitudinal research (1981), from which he concluded that there was no premorbid “alcoholic personality” or predictive personality state prior to alcohol addiction, furthers this line of thinking. The present results cannot be taken to suggest that addicts do not differ emotionally from the general nonaddict population or that addicts never suffer from preexisting psychopathology, but only that the emotional issues do not seem to differentiate between the drug-of-choice groups.

Most of the significant differences among the drug-of-choice groups were found in social and physical reasons for use. It was not altogether surprising that the alcohol group selected the most social reasons. This group selected significantly more social reasons than did the opioid and amphetamine groups; the difference between the alcohol

group and the marijuana and cocaine groups did not reach statistical significance.

The importance of physical reasons for use found among stimulant addicts in comparison with other groups was noteworthy, but difficult to interpret. It is possible that this in some way indicates personality differences that are not measured by reports of feelings. Why would an individual want to be energized or more awake? Clinicians might suggest that this occurs when a person is suffering from depression. However, the stimulant groups did not differ from other groups in their reports of depression as a reason for use. Perhaps this represents a neurological or biochemical difference in the stimulant drug-of-choice groups. Further study may shed light on these questions.

Although addicts who have voluntarily selected to recover in NA may differ from addicts in the general population, some tentative clinical implications may be drawn from these findings. The lack of significant emotional differences suggests that treatment may not need to focus on personality or pathology differences between drug-of-choice groups — at least after an initial period of withdrawal during which time the special issues involved in the use of a specific drug may need to be addressed. Also, 74.7% of the subjects reported that either their mother, father, or one or both of their grandparents abused alcohol and/or other drugs; a finding consistent with other studies indicating that addiction is a family problem. This high incidence suggests that the addict population is also an adult children of alcoholic/addict population. The early age of first use of the drug of choice among all drug groups suggests the need for prevention programs or early treatment. Given the results of the present study, such programs should perhaps focus on normal adolescent problems and on developing coping skills. In the open-ended question about the reasons for use of drug of choice, the subjects indicated the same problems that later occurred in the checklists of reasons for use. There was frequent mention in this format of social and interpersonal issues of concern to teenagers. Some of these responses were as follows: “feelings of not belonging, inadequate”; “I was trying to fit in and be part of a crowd. I thought it would help make friends and be liked”; “shyness”; “to be more accepted with friends”; and “it made me fit in with the crowd, made me accepted.” These types of responses occurred in all drug groups, suggesting that prevention and treatment programs need to concentrate on such issues.

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