

DOCUMENT RESUME

ED 114 730

CG 010 188

AUTHOR Fago, David P.; Sedlacek, William E.  
 TITLE Sex Differences in University Freshmen Attitudes and Behavior toward Drugs: A Three Year Comparison. Research Report Number 8-74.  
 INSTITUTION Maryland Univ., College Park. Counseling Center.  
 REPORT NO RR-8-74  
 PUB DATE 74  
 NOTE 14p.

EDRS PRICE MF-\$0.76 HC-\$1.58 Plus Postage  
 DESCRIPTORS \*Behavior; \*College Freshmen; \*Drug Abuse; Higher Education; Research Projects; \*Sex Differences; \*Student Attitudes; Surveys

ABSTRACT

Sex differences in the attitudes and behavior of entering freshmen toward 13 drugs were examined through the administration of anonymous polls at the University of Maryland during three consecutive years, 1972-1974. The polls were designed to investigate the incidence and frequency of drug use; the students' reasons for using and not using drugs; and student attitudes toward drug legalization, the illegal sale and use of drugs, and the University's role in providing drug-related services. Results suggested distinct differences between males and females, particularly in their patterns of drug use. The incidence of drug use and regular use were found to be fairly stable for males and increasing for females over the three years sampled. Beer and marijuana however, reflected increases in incidence and frequency of use for both sexes. Significant sex differences were also found in 6 of 15 attitude items. In general, women seemed to be more conservative in their attitudes. Reasons for usage and non-usage were similar for males and females. (Author)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

# COUNSELING CENTER

Office of Vice Chancellor for Student Affairs

UNIVERSITY OF MARYLAND

College Park, Maryland



U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

ED114730

COUNSELING CENTER  
UNIVERSITY OF MARYLAND  
COLLEGE PARK, MARYLAND

SEX DIFFERENCES IN UNIVERSITY FRESHMAN ATTITUDES  
AND BEHAVIOR TOWARD DRUGS: A THREE YEAR COMPARISON

David P. Fago and William E. Sedlacek

Research Report #8-74

Counseling Center  
University of Maryland  
College Park, Maryland

Sex Differences in University Freshman Attitudes  
and Behavior toward Drugs: A Three Year Comparison

David P. Fago and William E. Sedlacek  
Research Report #8-74

Summary

Sex differences in entering university freshmen attitudes and behavior toward thirteen drugs were examined through the administration of anonymous polls at the University of Maryland during three consecutive years, 1972-1974. The poll was designed to investigate the incidence and frequency of drug use, as well as students' reasons for using and not using drugs, their attitudes toward drug legalization, the illegal sale and use of drugs, and the University's role in providing drug related services.

Results suggested distinct differences between males and females, particularly in their use of drugs. The incidence of drug use (% having tried) and regular use (once/month or more) were found to be fairly stable for males and increasing for females over the three years sampled. Two exceptions were beer and marijuana, which reflected increases in incidence and frequency of use for both sexes. Significant sex differences were also found in 6 of 15 attitude items. In general, women seemed to be more conservative in their attitudes. Males and females were found to use and not use drugs primarily for the same reasons.

Previous studies conducted at the University of Maryland have presented empirical evidence of a changing pattern in freshman students' use of drugs (Horowitz & Sedlacek, 1973; Fago & Sedlacek, 1975; Howard & Sedlacek, 1975). Similar changes, i.e., an increasing trend in student drug use, have been reported on other university campuses (Lemay & Penn, 1973; Mechanick, et al., 1973).

One of the previous studies conducted at Maryland (Fago & Sedlacek, 1975) found that males' frequency of marijuana use increased significantly over a one year period while females' use did not. From this finding it was speculated that sex might well be a significant variable in the changing pattern of drug use. Other studies have reported sex differences in drug use, but none have systematically analyzed sex differences across more than one cross-sectional sample. These studies consistently report young male adults as more frequently having tried drugs and using drugs more regularly than young female adults (Angst, et al., 1973; Simon, 1973; Fisher, et al., 1974; Girdano & Girdano, 1974).

The purpose of the present study was to investigate sex differences in University of Maryland freshman students' attitudes and behavior toward drugs across samples from three consecutive years: 1972, 1973, 1974. Comparison of data previously gathered at Maryland with other reports of student drug use suggests that (1) incidence of drug use (nine substances) is generally higher for Maryland freshman than that found in a nationwide sample of high school graduates during the same year (Roe, 1973), and (2) incidence of marijuana use is lower for Maryland freshmen than that found in three west coast colleges and universities (Fisher, et al., 1974).

For purposes of this study, drug use is defined in several ways. "Incidence of use" is defined as the percentage of subjects who indicate that they have used a drug one or more times. Incidence has then been divided into two categories: "experimental use" (a few times or less) and "regular use" (once a month or more). The categories subsumed under experimental use and regular use, when combined, form a "frequency of use" continuum.

## Method

### Instrument

Representative samples of incoming freshmen from three years (1972, 1973, 1974) were asked to complete an anonymous poll. With the exception of two demographic variables that were different on the first year's poll (1972), the polling instrument was identical for all three samples. It included questions examining the extent of usage of thirteen drugs (marijuana, hashish, speed, downs, mescaline, LSD, DMT, cocaine, heroin, beer, wine, liquor, and cigarettes), reasons for use and non-use of drugs, attitudes toward (a) legalization of drugs, (b) users and sellers of drugs, and (c) drug-related services, and three demographic variables (1972: sex, place of residence, and family income; 1973 and 1974: sex, size of hometown, and type of high school attended).

### Subjects

The poll was administered to entering freshmen at the University of Maryland, College Park, during the summers of 1972, 1973, and 1974. The sample sizes for the three polls were 716, 491, and 398 respectively. Subjects in all three polls were fairly equally divided by sex. A small portion of the 1973 and 1974 samples had attended private (6%) and parochial (6%) schools. Most of the subjects in the latter two years came from suburban areas (75%); the remainder came from cities over 50,000 (14%), cities under 50,000 (6%), and farms or open country (5%).

### Data Analysis

Incidence of use and regular use were analyzed by per cent response according to sex and year of poll (Tables 1 and 2). Frequency of drug use was analyzed for 12 drugs (heroin dropped because of infrequent responses), using a 2-way analysis of variance; sex and year of poll (3 levels) served as main effects. Reasons for use and non-use of drugs were analyzed by year and sex, using Chi square. Likert attitude items were analyzed using a 2-way analysis of variance, with sex and year of poll serving as main effects. The following analyses were conducted using the 1974 sample only: Using one-way analyses of variance, frequency of drug use was analyzed by; (1) reasons for use and (2) reasons for non-use. Drug use was trichotomized (non-use, experimental use, regular use) and analyzed by place of residence and type of high school attended, using Chi square. All significance tests reported were at the .05 level.

## Results

### Incidence of Drug Use

During the past two years the incidence of drug use among entering University of Maryland freshmen has been consistently rising for 11 of the 13 investigated substances (Table 1). Comparing the 1974 freshmen sample with the 1972 freshmen sample, the following increases in incidence of use are found: marijuana 47% to 61%; hashish, 34% to 40%; speed, 15% to 18%; downs, 16% to 22%; LSD, 9% to 12%; DMT, 4% to 7%; cocaine, 6% to 11%; beer, 85% to 92%; wine, 90% to 93%; liquor, 75% to 78%; and cigarettes, 60% to 63%. The two exceptions to this increasing trend are mescaline (12% to 8%) and heroin (2% to 1%).

During this two year period a change was also reflected in the relationship between incidence of drug use and sex of user (Table 1). In the 1972 sample cigarettes was the only substance that had been tried by a larger proportion of women than men in the sample. In 1974, however, a larger proportion of women than men reported having tried nine substances: marijuana, speed, downs, mescaline, LSD, DMT, cocaine, wine and cigarettes.

### Regular Drug Use

While the percentage of entering freshmen who have tried drugs has been generally increasing over the past two years, the percentage of new students who identify themselves as regular users has remained fairly stable (Table 2). The only substances found to be used regularly (once a month or more) by a substantially larger (more than 2%) percentage of the 1974 sample were marijuana (37% compared to 28% in 1972) and beer (59% compared to 51% in 1972). However, the changing relationship between drug use and sex of the users is also evident when regular use is the criterion. In 1972 no substances were found to be regularly used by a higher proportion of women than men; in 1973 this increased to three substances (cigarettes, wine, and speed), and in 1974 it increased to five (cigarettes, wine, speed, LSD, and liquor).

### Frequency of Drug Use

The analyses of variance for frequency of drug use by year and sex revealed several statistically significant main and interaction effects. Significant increases in frequency of use across years were found for beer, marijuana, and DMT. Significant sex differences in frequency of use were found for beer, wine, marijuana, hashish, mescaline, LSD, and cigarettes. Significant interactions between sex and year were found for liquor, marijuana, LSD, speed and cigarettes. While males' frequency of drug use showed consistent yearly increases for only one substance (beer), females showed consistent increases for seven (beer, marijuana, hashish, LSD, downs, speed and cigarettes). Of the 13 substances investigated, 5 were found to be used less frequently by women than men in 1972 and more frequently by women in 1974: mescaline, LSD, speed, downs and wine.

### Reasons for Drug Use and Non-Use

The reasons stated by entering freshmen for use and non-use of drugs have been found to be extremely stable. Chi square analyses by year and sex revealed no significant differences. Analysis of 1974 subjects' frequency of drug use by their reasons for use showed that frequency of cigarette and marijuana use was significantly greater for subjects who stated that they do not use drugs because of their "illegality". Frequency of hashish use was found to be significantly higher for subjects who stated that they use drugs to (1) experience things more vividly, (2) get high, feel good, and (3) relieve boredom. These findings, however, may be artifacts of small frequencies i.e., a majority of the sample stated that they used or did not use drugs for one reason: to "get high, feel good" (68%) or "no desire to experience its effects" (66%).

### High School and Place of Residence

Significant differences in the 1974 sample's drug use (never, experimental use, regular use) according to type of high school attended (public, parochial, private) were found for beer, marijuana, speed, and cigarettes, using Chi square. In all cases, drug users were more frequently found among parochial and private school graduates: significantly more regular users of marijuana, speed and cigarettes were found among the parochial school sample, and significantly more regular beer drinkers were found among the private school sample. These findings, however, appear to be artifacts of the sexual composition of the samples. The private school sample was predominantly male (60%), the parochial school sample was predominately female (80%), and the public school sample was considerably larger, with an even sex distribution.

Significant differences in drug use based on place of residence (farm, suburb, city under 50,000, city between 50,000 and 500,000) were found for beer, liquor and speed, using Chi square. These statistical differences were largely due to more regular users in the farm sample.

### Attitudes

Table 3 presents means and standard deviations for 15 attitude items. Two-way analyses of variance by year and sex revealed several statistically significant main and interaction effects. Significant differences were found in males' and females' agreement to: (1) the legalization of marijuana (males agree more than females), (2) reporting someone for using marijuana, (females agree more than males), (3) reporting someone for using drugs other than marijuana (females agree more than males), (4) attending a drug education program (females agree more than males), (5) providing a drug counseling service for students (females agree more than males), and (6) feeling sorry for people on drugs (females agree more than males). Significant differences across years were found in subjects' agreement to: (1) reporting someone for using drugs other than marijuana, (2) reporting someone for selling marijuana, (3) reporting someone for selling drugs other than marijuana, and (4) feeling sorry for people on drugs. Statistical differences in the first three of these items were produced by greater agreement in the 1973 sample; in the fourth item, agreement consistently decreased across the three samples. Significant interaction



effects were found for two items: agreement to, (1) a Student Government Association funded drug counseling center (1972; males agreed more than females, 1973, 74: females agreed more than males) and, (2) the University turning in students selling drugs other than marijuana (1972: females agreed more than males, 1973, 74: males agreed more than females).

#### Discussion

The results of this study give clear indication of fairly dramatic sex differences in university freshman students' attitudes and behavior toward drugs. In contrast to earlier studies (Angst, et al., 1973; Fisher, et al., 1974; Simon, 1974), incidence and frequency of use of several drugs was found to be greater for women. In addition, the trend in drug use was found to be increasing for women and relatively stable for men. These findings present the question of whether the trend in drug use among women is a unique phenomenon or merely an identical but delayed version of the trend observed in the male student population. Other results from this study do not fully support either interpretation. For example, the present results indicate that men and women take drugs for the same reasons, suggesting that males and females use of drugs have the same etiology, and are therefore part of the same phenomenon. However, previous findings by Wogan & Elliot (1972), that female drug users are significantly less anxious than non-users, and that male users and non-users are not likewise differentiated, suggest that drug use may have different rewards for males and females. Most likely, the similarity of the male and female trends is relative to the particular drug in question. One might speculate that men and women use some drugs for similar reasons and other drugs for different reasons. Hence, we might expect to see women's use of some drugs follow a pattern similar to that of men and begin to decrease, while their use of other drugs may follow a different course. Certainly the differences found in, and suggested by this study warrant further investigation.

TABLE 1  
 PERCENT INCIDENCE\* OF DRUG USE BY SEX AND YEAR OF POLL

	<u>MARIJUANA</u>	<u>HASHISH</u>	<u>SPEED</u>	<u>DOWN'S</u>	<u>MASCALINE</u>	<u>LSD</u>	<u>DMT</u>	<u>COCAINE</u>	<u>HEROIN</u>	<u>BEER</u>	<u>WINE</u>	<u>LIQUOR</u>	<u>CIGARETTES</u>
1972 (Male)	54%	40%	18%	18%	15%	13%	6%	7%	3%	91%	91%	81%	58%
(Female)	38	25	12	13	8	5	3	3	1	81	88	69	62
TOTAL	47	34	15	16	12	9	4	6	2	85	90	75	60
1973 (Male)	55	36	13	18	10	10	5	10	2	92	91	74	57
(Female)	47	33	18	18	10	9	5	5	2	86	93	74	58
TOTAL	52	35	16	18	10	10	5	8	2	89	92	74	57
1974 (Male)	59	42	14	18	7	11	7	10	2	95	91	81	54
(Female)	62	38	22	25	9	12	8	11	1	90	95	75	71
TOTAL	61%	40%	18%	22%	8%	12%	7%	11%	1%	92%	93%	78%	63%

\* INCIDENCE = % of subjects indicating they have used a drug one or more times

TABLE 2

PERCENT REGULAR\* DRUG USE BY SEX AND YEAR OF POLL

	<u>MARIJUANA</u>	<u>HASHISH</u>	<u>SPEED</u>	<u>DOWN</u>	<u>MASCALINE</u>	<u>LSD</u>	<u>DMT</u>	<u>COCAINE</u>	<u>HEROIN</u>	<u>BEER</u>	<u>WINE</u>	<u>LIQUOR</u>	<u>CIGARETTES</u>
1972 (Male)	34%	20%	4%	5%	2%	3%	0%	1%	1%	64%	53%	37%	29%
(Female)	22	12	3	4	.5	.5	0	.5	.5	37	47	29	29
TOTAL	28	16	3	5	1	2	0	1	.5	51	50	33	29
1973 (Male)	35	13	1	4	1	2	1	2	.5	64	49	33	24
(Female)	31	10	3	4	1	.5	1	0	0	45	54	29	27
TOTAL	33	12	2	4	1	1	1	1	.5	54	51	31	25
1974 (Male)	40	17	3	4	2	3	1	2	.5	68	45	29	22
(Female)	34	16	6	4	1	4	.5	0	0	50	54	38	37
TOTAL	37%	16%	4%	4%	1%	3%	1%	1%	.5%	59%	50%	34%	30%

\* REGULAR USE = once a month or more

TABLE 3

MEANS\* AND STANDARD DEVIATIONS FOR FIFTEEN ATTITUDINAL ITEMS  
BY YEAR AND SEX

	1972		1973		1974							
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>						
	Mean	SD	Mean	SD	Mean	SD						
1. Marijuana should be legalized.	2.32	1.28	2.58	1.33	2.53	1.26	2.65	1.30	2.39	1.35	2.50	1.29
2. All drugs should be legalized.	4.52	.81	4.55	.79	4.47	.98	4.45	.73	4.48	.83	4.63	.54
3. If I knew of someone USING MARIJUANA I would report them to the proper authorities.	4.44	.79	4.29	.86	4.36	.91	4.28	.98	4.45	.87	4.43	.85
4. If I were aware of someone USING OTHER DRUGS I would report them to the proper authorities.	4.13	1.00	3.93	1.03	3.91	1.06	3.83	1.10	4.10	.99	4.07	.95
5. If I were aware of someone SELLING MARIJUANA I would report them to the proper authorities.	3.82	1.31	3.64	1.28	3.77	1.16	3.67	1.25	3.92	1.23	3.99	1.17
6. If I were aware of someone SELLING OTHER DRUGS I would report them to the proper authorities.	3.28	1.37	3.18	1.31	3.04	1.25	3.18	1.27	3.29	1.35	3.51	1.29
7. I would NOT attend a Drug Education program on campus.	3.29	1.19	3.33	1.14	3.11	1.22	3.28	1.05	3.25	1.12	3.53	1.12
8. A Drug Counseling Service should be provided for students.	1.61	.80	1.56	.84	1.73	.89	1.60	.80	1.76	.78	1.49	.64
9. The Student Government Association should fund a Drug Counseling Center.	2.22	1.01	2.24	1.04	2.44	1.11	2.05	.95	2.35	.89	2.24	.83
10. I DO NOT feel sorry for people on drugs.	3.24	1.27	3.50	1.13	3.25	1.19	3.38	1.14	2.97	1.28	3.23	1.14
11. If the University has knowledge of a student USING MARIJUANA they should turn him over to the proper authorities.	4.00	1.13	3.85	1.07	3.94	1.08	3.89	1.10	4.06	1.07	4.02	1.05

TABLE 3  
(Continued)

	1972		1973		1974							
	Male	Female	Male	Female	Male	Female						
	Mean	SD	Mean	SD	Mean	SD						
12. If the University has knowledge of a student USING OTHER DRUGS they should turn him over to the proper authorities.	3.49	1.28	3.29	1.20	3.28	1.27	3.35	1.18	3.36	1.26	3.45	1.15
13. If the University has knowledge of a student SELLING MARIJUANA they should turn him over to the proper authorities.	3.34	1.42	3.09	1.31	3.23	1.31	3.39	1.23	3.35	1.37	3.35	1.31
14. If the University has knowledge of a student SELLING OTHER DRUGS they should turn him over to the proper authorities.	2.64	1.45	2.40	1.24	2.44	1.31	2.79	1.24	2.59	1.36	2.69	1.26
15. If I were using drugs and felt a need for counseling, I would go to the University Counseling Center.	2.12	1.05	2.05	.97	2.09	.86	2.23	.90	2.17	.93	2.11	.95

\* 1 = strongly agree; 5 = strongly disagree

## References

- Angst, J., Baumann, U., Muller, U., and Ruppen, R. Epidemiology of drug consumption in the canton of Zurich: Inquiry in a group of 6315 young men and 1381 young women all aged 19. Archives for Psychiatrie and Nervenkrankheiten, 1973, 217(1), 11-24.
- Fago, D. P. and Sedlacek, W. E. Trends in university student attitudes and behavior toward drugs. Journal of the National Association of Women Deans, Administrators and Counselors. 1975 (in press).
- Fisher, G., Steckler, A., Strantz, I., and Nabholz, E. The legalization of marijuana: Views of several American populations of users and non-users. Journal of Psychedelic Drugs, 1974, 6(3), 333-349.
- Girdano, D. A. and Girdano, D. D. Drug usage trends among college students. College Student Journal, 1974, 8(3), 94-96.
- Horowitz, J. L. and Sedlacek, W. E. University student attitudes and behavior toward drugs. Journal of College Student Personnel, 1973, 14, No. 4, 236-237.
- Howard, B. A. and Sedlacek, W. E. Trends in freshman attitudes and use of drugs. College Student Journal, 1975 (in press).
- Lemay, M. L. and Penn, J. R. Drug usage trends in college living units during a three year period. Drug Forum, 1973, 2(3), 309-315.
- Mechanick, P., Mintz, J., Gallagher, J., Lapid, G., Rubin, R. & Good, J. Non-medical drug use among medical students. Archives of General Psychiatry, 1973, 29(1), 48-50.
- Roe, B. Don't forget alcohol. National Association of Student Personnel Administrators Journal, 1973, 11(1), 27-33.
- Simon, W. E. Ordinal position of birth in the family constellation and adult smoking behavior. Journal of Social Psychology, 1973, 90(1) 157-158.
- Wogan, M. & Elliot, J. P. Drug use and level of anxiety among college students. Journal of Youth & Adolescence, 1972, 325-331.