This study attempted to clarify the relationship between drug involvement and academic accomplishments. Unlike other studies, it was controlled for aptitude and sex. In a structured interview, the College Behavior Questionnaire (CBQ) was administered to 77 male and 67 female student subjects. Based on the CBQ results three groups were identified: 26 male and 22 female nonusers of drugs (NU), 30 female and 29 male moderate users (MU), and 15 female and 22 male heavy users (HU). The cumulative grade point average (GPA) of the SS was the measure of academic achievement. An estimate of each S's degree of satisfaction with his academic performance was obtained. An analysis of variance on the data indicated that only HU males scored significantly lower than NU males. These results suggest that while HU females might benefit from appropriate counseling, disinterest of HU males in academic performance might be responsible for their lower GPA scores. (SE)
Drug Involvement and Academic Striving

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In May, one of my research assistants mentioned some of the data from this study at a Florida Psychological Association convention symposium. The following day, the Tampa Tribune published an article with the headline, "Drugs Dropped Grades, University of Miami Research Shows." As you will see, this research does not show that drugs dropped grades. Neither does it show that use of drugs increased grades. What this study attempts to do is to clarify the relationship between drug involvement and academic accomplishments.

The most commonly used index of academic achievement has been Grade Point Average (GPA), which provides an objective, unbiased estimate. In a relatively early study conducted in 1965-66 at California colleges, Blum (1969) found that drug experience was not a useful predictor of GPA or other academic indices. In contrast, Suchman (1968), working at a West Coast university, reported more grades below a 2.5 average among drug users than abstainers. The study by Goode (1971) at a S.U.N.Y. campus fails to substantiate either of these studies. Goode found the highest grades among casual marijuana smokers and lowest grades among heavy marijuana smokers. Surprisingly, abstainers obtained grades only slightly higher than the heavy users. A survey of such studies by the National Commission on Marijuana and Drug Abuse (1972) led to no definite conclusions concerning the relationship of academic achievement and drug use.
The discrepancies in such past studies can be attributed to factors such as changing patterns of drug use and variability among different campuses and locales. In addition, the different criteria of drug experience are important. Some studies such as those of Goode and Suchman merely differentiated Ss according to marijuana use while failing to consider the degree of overall drug involvement. Clearly, the nature of student drug use has been constantly broadening so that consideration of involvement with the whole range of drugs must be evaluated. Another possibly important factor ignored in some of these studies has been sex differentiation.

Aside from the aforementioned problems, many past studies overlooked two factors which clearly affect a student’s academic achievement, his aptitude and his degree of satisfaction with his performance. It is conceivable that these two factors could be related to drug use in a different way than actual achievement. For example, finding that low achievers had relatively low aptitude for that they were satisfied with their grades could be quite meaningful in attempting to interpret data linking grades and drug involvement.

Academic aptitude has received some previous attention as a correlate of student drug use. In 1968 Keniston observed that drug use has been more common at elite schools with highly capable students. Much current evidence exists which seems to indicate that Keniston’s observations are no longer applicable. For example, Milman and Anker (1971) found an inverse relationship between high school class standing and drug usage in college. The current study utilized a measure of aptitude for college which was administered to the Ss immediately before they began their college careers.
METHOD

Subjects and Procedures

Twenty males and twenty females from each of the undergraduate classes at the University of Miami were randomly selected from the registrar's directory. Sampling and data collection were completed during the 1971-72 academic year. Of 160 originally selected Ss, 144 or 90% voluntarily participated in this study. Participants included 77 males and 67 females.

A structured interview, the College Behavior Questionnaire (CBQ, Rockway & Kahn, 1971), was administered to each S. The CBQ, which is individually administered, was designed to elicit detailed, but quantifiable, information about students' attitudes and experiences concerning the use of illicit drugs.

The information that was obtained enabled the researchers to rate each S from 0 (no involvement with drugs) to 7 (heavy involvement with drugs) on the Drug Involvement Scale (Holyrod & Kahn, 1972). This scale has been found to provide a valid and highly reliable estimate of drug involvement. In the formation of groups for this study, Ss in the category 0 and 1 were labeled non-users (NU), Ss in categories 2 and 3 were labeled moderate users (MU) and Ss in categories 4, 5, 6, and 7 were labeled heavy users (HU). There were 22 female and 26 male NU Ss; 30 female and 29 male MU Ss, and 15 female and 22 male HU Ss.

Measures

The measure of academic achievement was the cumulative GPA obtained by Ss as of the end of the spring semester, 1972. The traditional four-point scale was used. Academic potential was estimated through the percentile obtained.
on the total reading score (Re) of the Cooperative English Test (1:60), a test given each entering Miami student in group form during freshman orientation week. This scale has been found to be a useful predictor of academic success in numerous studies (Webb & McCall, 1953; Jensen & Clark, 1955). An estimate of each S’s degree of satisfaction with his academic performance was obtained from the following CBQ question: How satisfied are you with your academic performance at the University of Miami? Responses could range on a five-point scale from very dissatisfied to very satisfied with intermediate labels provided.

RESULTS

An analysis of variance is presented in Table 1 which assesses differences between HU Ss, MU Ss, and NU Ss in GPA, Re, and satisfaction with academic achievement. Scores for Ss of each sex were analyzed separately. The age factor was included to ascertain that the groups were comparable on this variable.

The data indicated no group differences in academic attitude. However, the MU Ss of both sexes tended to score somewhat higher than their counterparts. Also, no differences were obtained on the age factor.

In regard to academic achievement, HU males obtained a significantly lower GPA than NU males, (P/ .001). HU females fared almost as poorly as the males by obtaining a 2.17 mean average. However, this mean score was not significantly lower than the scores of the NU females.

HU females, however, were found to be significantly less satisfied with their academic performances (P/ .001) than NU females. In contrast no differences were found among the male drug groups on this variable. Sur-
prisingly, in fact, the mean score for HU males was slightly higher than that of the other two male groups on this variable.

In Table I here

The findings from this study suggest that the relationship between drug involvement and academic striving is rather complex. It seems clear that male undergraduates at the University of Miami who are heavily involved with drugs obtain lower grades than drug abusers. This trend is highly significant and has endured during the past few years (Rockway & Kahn, 1971; Stein & Kahn, 1972). This difference cannot be explained in terms of aptitude since the abusers and heavy users are comparable according to the results of a pre-college entrance exam.

A clue to the basis for this disparity can be found in results relative to the question concerning satisfaction with grades. Despite their low scholastic averages and their adequate ability levels, male heavy users tended to be slightly more satisfied with their academic performances than abusers and moderate users. One could speculate that these male heavy users are not highly motivated to succeed in traditional achievement areas. This speculation is supported by Schoolar, White, and Cohen (1972) who interpreted the personalities of drug users to include lack of respect for traditional values and goals.

The results differed in an important way for females. While coed heavy users tended to obtain worse grades than their nonuser counterparts, they were quite dissatisfied with their performances. This dissatisfaction
could be attributable to a general tendency toward self-criticism, to parental pressures for high grades, or to unrealistically high expectations. At any rate, this evidence indicates that female heavy users do not reject traditional goals to the same extent as male heavy users. This finding is probably associated with the greater degree of difficulty among post-adolescent females in separating emotionally from their families.

Because of their dissatisfaction with themselves, whatever the cause, female heavy drug users may be an excellent target group for counseling. Certainly, it is conceivable that their dissatisfaction with themselves could be a contributing factor in their use of drugs at potentially self-destructive levels. Counseling might be aimed at reducing the dissatisfaction associated with the use of drugs.

The results of this study have a number of implications for future research in this area. The differential findings for males and females in this study seem meaningful. Thus, future investigators of college drug use should be careful to avoid combining both sexes in data analysis without considering possible sex differences. The findings also suggest that factors such as motivation would be useful to consider along with actual achievement. The current study may have limited generality; thus, it is hoped that such factors will be included in studies at other campuses. Finally, future studies of academic striving and drug involvement might also include personality measures such as need or expectancy for achievement.
<table>
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<th>HU</th>
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</table>

*P ≤ .05
**P ≤ .01
***P ≤ .001
References


Stein, A. & Kahn, M. Attitudes and characteristics of non-users. Paper presented at the meeting of the Southeastern Psychological Association, Atlanta, April, 1972.
