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# People's Views on Marijuana, Other Drugs & Driving: An Update

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#### David M. Grilly, Ph.D.\*

A few years ago this journal published the results of two surveys conducted by this author in January of 1975 and 1977, which dealt with people's views on the effects of drugs on driving skills (Grilly 1977). Although the surveys dealt with most common psychotropic drugs, this author was particularly interested in those aspects of the surveys dealing with marijuana in comparison with other drugs, primarily because of the ongoing controversy about marijuana's effects on driving, in both scientific and political circles. Essentially the same survey was conducted again in January of 1980 to see if the trends and conclusions noted in the initial report were still valid three years later. The present report updates those conclusions with the results of this most recent survey.

As in the previous surveys, students (N = 400) in a state-supported urban university in Ohio were asked to anonymously answer (on computer scored sheets) questions pertaining to their age, sex, drug and driving experience, as well as their views of the effects of various drugs on their own and other people's driving skills. The actual questions posed with respect to the latter were the following: (1) Under commonly used doses of (drug), my driving skills are: (a) greatly impaired, (b) impaired a little, (c) not affected, (d) improved a little, (e) greatly improved, and (f) question not applicable; (2) Under commonly used doses of (drug), other people's driving skills are: (a) greatly impaired, (b) impaired a little, (c) not affected, (d) improved a little, (e) greatly improved, and (f) no opinion. The surveys were the same except for the addition of questions about cocaine and phencyclidine (PCP, "angel dust") in the 1980 survey, because of concerns about the reportedly increasing use of these drugs.

The demographic characteristics of the 1980 sample were similar to the previous samples on most dimensions with the following exceptions: (1) the percentage of respondents in the 22 and younger age categories had dropped from approximately 74 percent to 68 percent, while the percentage in the 27 and older categories rose from approximately seven percent to 15 percent (in all survey samples the younger ages were overrepresented relative to the university population); (2) the percentage of lower division (freshman and sophomore) college students increased from approximately 49 percent to 57 percent with a corresponding decrease in upper division (junior, senior and graduate) students. (As with age, the lower divisions were overrepresented relative to the university population.); and (3) the average months of driving experience dropped from approximately 61 months to 24 months. Most of the changes with respect to the first two dimensions are probably due to changing characteristics of the population attending the university. The change in the last dimension may be related to the changes in the other two, in addition to a shift toward an increasing use of mass transportation in the community. Whatever the reasons for these changes in the sample characteristics, none of the subject variables of sex, age, year of college, or driving experience had much impact on the respondents' perceptions or attitudes of the effects of the drugs on driving skills except when these covaried with frequency of drug usage.

In accordance with recent national surveys (NIDA 1979) of drug usage in respondents of comparable age and educational status, these present surveys do not indicate much change in drug use patterns from 1975 to 1980 except with respect to nicotine (cigarette) usage, which has decreased considerably. Also, according to these surveys, regular use of marijuana (one or more times per week) has gone up slightly from 19 percent to 23 percent in 1980, while experimental use (used less than once per month) or nonuse has remained constant at approximately 64 percent in spite of the fact that marijuana decriminalization occurred in Ohio in 1976.

The following are conclusions or trends noted in the 1975 and 1977 surveys. These have been extended to include the results of the 1980 survey.

(1) Marijuana was perceived by the majority of those respondents with an opinion to be detrimental to driving skills of both themselves and others. The 1980 data essentially replicate the data from 1975 and 1977 surveys.

(2) Marijuana was not perceived to be as detrimental to other people's driving skills as commonly used doses of alchohol, barbiturates, narcotics or LSD. The 1980 data also support this conclusion. In addition, they indicate that PCP is perceived to be more detrimental than marijuana in this respect.

(3) In terms of their own driving, only alcohol was perceived to be more detrimental than marijuana, with the largest discrepancy between these two drugs occurring in the most frequent users of the two drugs. As noted in Table I, the 1980 results are completely in accordance with this conclusion. This difference is even more significant in light of the fact that the large

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### TABLE I

## PERCENTAGE OF RESPONDENTS (WITH AN OPINION OR FOR WHOM THE QUESTION WAS APPLICABLE) SAYING THAT MARIJUANA OR ALCOHOL IMPAIRS DRIVING AS A FUNCTION OF SURVEY YEAR, THEIR OWN FREQUENCY OF USE OF THE RESPECTIVE DRUG AND THE TYPE OF QUESTION, (I.E., WHETHER IT IS THEMSELVES OR OTHER PEOPLE DRIVING UNDER THE INFLUENCE OF THESE DRUGS).\*

	Marijuana Impairs Driving			Alcohol Impairs Driving		
	1975	1977	1980	1975	1977	1980
Regular Users (one or more times per week)						
Themselves Driving Others Driving		50 ± 9 71 ± 9			83 ± 5 94 ± 3	
Occasional Users (one to three times per month)						
Themselves Driving Others Driving		74 ± 10 87 ± 7			75 ± 6 96 ± 3	
Nonusers or Experimental Users (less than once per month)						
Themselves Driving** Others Driving	73 ± 9 86 ± 4	70 ± 9 87 ± 4			62 ± 10 93 ± 4	

\*The percentages include the values of the 90 percent confidence levels.

\*\* Responses from nonusers were not included in this category because they would have no basis

for judging the effect of the drugs on their own driving.

majority (89 percent) of regular marijuana users had considerable experience with alcohol (i.e., used it one or more times per month).

(4) For all drug categories, the respondents were more likely to indicate that other people's driving skills were more impaired than their own. The same results, including those regarding cocaine and phencyclidine, were obtained in 1980. This can be seen in Table I with respect to marijuana and alcohol.

(5) In the 1975 and 1977 surveys, the percentage of respondents reporting that marijuana impairs driving (regarding both themselves and others) decreased markedly as their frequency of marijuana use increased. This relationship was not noted with respect to frequency of alcohol use and driving under the influence of alcohol (see Table I). The relationship between frequency of marijuana use and its perceived effects on driving was also indicated in the 1980 survey, but for reasons discussed in the next paragraph, the relationship was not as profound as in previous years.

(6) Based on other surveys in 1971 (Klein, Davis &

Blackbourne 1971) and 1972 (Waller, Lamborn & Steffenhagen 1974) and this author's surveys in 1975 and 1977, it was concluded that there has been a continued and considerable increase in the proportion of regular marijuana users who believe that marijuana impairs other people's driving skills (22 percent in 1971, 40 percent in 1972, 55 percent in 1975 and 71 percent in 1977). The results from the 1980 survey indicate that this trend is continuing, as the proportion of regular marijuana users indicating that marijuana impaired driving skills of other people had risen to 83 percent (see Table I). In addition, the results from the 1975, 1977 and 1980 surveys indicate that this trend is occurring with respect to the users' own driving skills, but the trend is not as strong.

To summarize, the results from the 1980 survey extend the conclusions and trends noted in this author's 1975 and 1977 surveys. For the most part, marijuana use in the age group sampled has stabilized over the past five years, but people's perceptions of its detrimental effects on driving have changed considerably. There has

#### GRILLY

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been a fairly large increase in the percentage of respondents saying that marijuana impairs driving skills of other people; with respect to themselves driving under the influence, a similar but less dramatic trend has occurred. Alcohol is still regarded as more detrimental to driving than marijuana. Interestingly, these trends and differences can be noted in scientific studies attempting to empirically measure and compare the decrement in driving while under the influence of these drugs (Jones 1976; Moskowitz 1976; Moskowitz, Hulbert & McGlothlin 1976; Thompson 1975; Dott 1974; Klonoff 1974; Linnoila 1974; Smart 1974; Ellingstad, McFarling & Struckman 1973; Rafaelson et al. 1973; Crancer et al. 1969). Unfortunately, these surveys and studies do not effectively deal with the issue of how many traffic accidents and deaths can actually be attributed to driving under the influence of marijuana nor the issue of the effects on driving of combined use of marijuana and alcohol, which is becoming more common.

#### REFERENCES

- Crancer, A.; Dille, J.M.; Delay, J.C.; Wallace, J.E. & Haykin, M. 1969. Comparison of the effects of marihuana and alcohol in simulated driving performance. *Science* Vol. 164(3881): 851-854.
- Dott, A.B. 1974. Effect of marijuana on aggression and risk acceptance in an automotive simulator. *Clinical Toxicology* Vol. 7(3): 289.
- Ellingstad, V.S.; McFarling, L.H. & Struckman, D.L. 1973. *Alcohol, Maribuana and Risk Taking.* Contract No. DOT-HS-191-2-301, University of South Dakota, Vermillion.
- Grilly, D.M. 1977. People's views on marihuana, drugs, and driving: A changing scene. *Journal of Psychedelic Drugs* Vol. 9(4): 311-315.
- Jones, F. 1976. Is driving "high" dangerous? Head Vol. 1: 37-38.
- Klein, A.W.; Davis, J.H. & Blackbourne, B.D. 1971. Marihuana and automobile crashes. *Journal of Drug Issues* Vol. 1: 18-26.
- Klonoff, H. 1974. Marijuana and driving in real-life situations. Science Vol. 186(4161): 317-324.
- Linnoila, M. 1974. Effects of drugs and alcohol on psychomotor skills related to driving. *Annals of Clinical Research* Vol. 6: 7-18.

- Moskowitz, H. 1976. Marihuana and driving. Accident Analysis and Prevention Vol. 8: 21-26.
- Moskowitz, H.; Hulbert, S. & McGlothlin, W.H. 1976. Marihuana: Effects on simulated driving performance. Accident Analysis and Prevention Vol. 8: 45-50.
- NIDA. 1979. National Survey of Drug Abuse: Main Findings 1979. Vol. 6. Contract No. 271-78-3508, Response Analysis Corporation, Princeton, New Jersey, and the Social Research Group of George Washington University, Washington, D.C.
- Rafaelson, O.J.; Bech, P.; Christiansen, J.; Christrup, H.; Nyboe, J. & Rafaelson, L. 1973. Cannabis and alcohol: Effects on simulated car driving. *Science* Vol. 179(4076): 920-923.
- Smart, R.G. 1974. Marihuana and driving risk among college students. Journal of Safety Research Vol. 6(4): 155-158.
- Thompson, P. 1975. "Stoned" driving is unpleasant, say marijuana smokers. *The Journal* (Addiction Research Foundation) Vol. 4(1): 13.
- Waller, J.A.; Lamborn, K.R. & Steffenhagen, R.A. 1974. Marihuana and driving among teenagers: Reported use patterns, effects, and experiences related to driving. Accident Analysis and Prevention Vol. 6: 141-161.