The Treatment of Hallucinogenic Drug Abusers: A Study of Physicians’ Perceptions

Frederick Jon Latimer
Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/masters_theses
Part of the Substance Abuse and Addiction Commons

Recommended Citation
https://scholarworks.wmich.edu/masters_theses/2769

This Masters Thesis-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Master's Theses by an authorized administrator of ScholarWorks at WMU. For more information, please contact maira.bundza@wmich.edu.
THE TREATMENT OF HALLUCINOGENIC DRUG ABUSERS: A STUDY OF PHYSICIANS' PERCEPTIONS

by

Frederick Jon Latimer

A Thesis
Submitted to the Faculty of The Graduate College in partial fulfillment of the Degree of Master of Arts

Western Michigan University
Kalamazoo, Michigan
August 1972
ACKNOWLEDGEMENTS

I wish to express a deep feeling of gratitude to Dr. Lewis Walker, chairman of my thesis committee, whose patience and knowledge resulted in the completion of this manuscript. Sincere thanks are also expressed to Mr. Paul Green, whose critical thoughts and insight into the problems at hand contributed greatly to the full expression of the ideas presented here. I wish also to thank Drs. Clifford Bryan and Edsel Erickson, both of whom contributed during the initial development of the data collection instrument. Thanks are also extended to both Mrs. Linda Emery and Mrs. Verne Sorge in the preparation of the rough drafts of the manuscript. Finally, the contributions and support of my wife, Diane, were greatly appreciated.

Frederick Jon Latimer
INFORMATION TO USERS

This dissertation was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48106
A Xerox Education Company

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
LATIMER, Frederick Jon
THE TREATMENT OF HALLUCINOGENIC DRUG ABUSERS:
A STUDY OF PHYSICIANS' PERCEPTIONS.

Western Michigan University, M.A., 1972
Sociology, general

University Microfilms, A XEROX Company, Ann Arbor, Michigan
PLEASE NOTE:

Some pages may have
indistinct print.
Filmed as received.

University Microfilms, A Xerox Education Company
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Related Literature</td>
<td>4</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>31</td>
</tr>
<tr>
<td>II</td>
<td></td>
</tr>
<tr>
<td>METHODOLOGY</td>
<td>33</td>
</tr>
<tr>
<td>Site and Sample</td>
<td>33</td>
</tr>
<tr>
<td>Research Method</td>
<td>42</td>
</tr>
<tr>
<td>Characteristics of Sample</td>
<td>44</td>
</tr>
<tr>
<td>III</td>
<td></td>
</tr>
<tr>
<td>FINDINGS</td>
<td>48</td>
</tr>
<tr>
<td>Findings Concerning the Relationship Between Physicians' Experience in Treatment and Attitudes Toward Hallucinogenic Drug Abusers</td>
<td>48</td>
</tr>
<tr>
<td>Findings Concerning the Relationship Between Physicians' Experience in Treatment and Choice of Post-Emergency Mode of Treatment</td>
<td>55</td>
</tr>
<tr>
<td>Findings Concerning the Relationship Between Physicians' Experience in Treatment and Their Attitudes Toward Specific Drugs</td>
<td>60</td>
</tr>
<tr>
<td>IV</td>
<td></td>
</tr>
<tr>
<td>SUMMARY AND CONCLUSIONS</td>
<td>66</td>
</tr>
<tr>
<td>Summary</td>
<td>66</td>
</tr>
<tr>
<td>Conclusions</td>
<td>70</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>74</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>80</td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>83</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
**LIST OF TABLES**

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Physicians' experience in treatment of hallucinogenic drug abusers</td>
<td>45</td>
</tr>
<tr>
<td>2</td>
<td>Physicians' medical specialty within survey hospital</td>
<td>46</td>
</tr>
<tr>
<td>3</td>
<td>Frequency of call duty among survey physicians</td>
<td>46</td>
</tr>
<tr>
<td>4</td>
<td>Comparison of physicians' treatment experience and agreement of past history of mental disorders among abusers</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>Comparison of physicians' treatment experience and agreement of expression of psychotic behavior among abusers as result of drug</td>
<td>54</td>
</tr>
<tr>
<td>6</td>
<td>Comparison of physicians' treatment experience and mode of treatment of abusers</td>
<td>56</td>
</tr>
<tr>
<td>7</td>
<td>Comparison of physicians' treatment experience and basis of post-emergency treatment</td>
<td>58</td>
</tr>
<tr>
<td>8</td>
<td>Perceptions of specific drugs by physicians who have treated drug abusers (N=54)</td>
<td>61</td>
</tr>
<tr>
<td>9</td>
<td>Perceptions of specific drugs by physicians who have not treated drug abusers (N=52)</td>
<td>63</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Although there has been a tremendous increase in the number of publications noting the large increase in drug use and abuse among younger members of society, these are often limited, especially since the possession and use of certain drugs is illegal. Furthermore, the accessibility of researchers to individuals who do use or abuse these drugs is limited, due to the respondents' fear of arrest or exposure. Consequently, due to low visibility, estimates of abuse are both crude and limited.

In addition, analysis of data collected on drugs has usually been in terms of: (1) who uses these drugs; (2) when, and in what circumstances, are these hallucinogenic drugs used; or (3) the political orientation and other individual characteristics of those classed as users or abusers.

Few studies have attempted to deal exclusively with the problem of drug abuse from the perspective of the treatment of "bad trips" among drug abusers.

---


2loc. cit., p. xiii.
Among those who use this perspective is Becker,¹ who feels that abusers suffering from a hallucinogenic drug overdose are usually brought to a hospital emergency ward where physicians diagnose the ailment and recommend hospitalization in the psychiatric wing. More to the point, Becker² theorizes that this treatment is not based on treatment of the anxiety exhibited as a localized phenomenon (i.e., the drug's effects, per se), but as the outbreak of a serious mental problem. Most of this is speculative, and Becker maintains that what is needed is a study of the way physicians treat cases of hallucinogenic drug overdose.

The purpose of this paper is to analyze the methods of treatment of hallucinogenic drug overdoses used by physicians, and the attitudes of these same physicians toward several hallucinogenic drugs, based on the amount of experience these physicians have in the area of treatment of hallucinogenic drug overdose.

Involved in this study are several general questions, including: (1) what influence does the factor of experience have on the attitudes of physicians toward hallu-


²loc. cit., p. 190.
cinogenic drugs and their abusers; and (2) what influence does the factor of experience have on the selection of a method of treatment?

An exploratory social-psychological study into the development of these attitudes among the physicians in an emergency room would seem to be advantageous by the fact that no such study exists at the present time. This is especially true in view of the fact that a physician's experience may determine the treatment he feels will bring about complete recovery of the patient. This may have important consequences for the patient himself since, if this treatment is not correct, the patient may have to redefine his self-concept in terms of what his illness actually is. For example, in the case of a tumor, the physician's experience may indicate to him that it is malignant, indicating treatment which would remove this as a threat to the patient's life. From the patient's perspective, the self may progressively become redefined as a person who is sick, who has a tumor, who has cancer, who may die. He may therefore resign himself to the fact that at least he must undergo a long series of treatments and may still die if the tumor has infiltrated into the surrounding tissues. At the same time, if experience indicates to the physician that the tumor may not be cancerous, the patient may define himself as being sick, but not dying.
The same, according to Becker,\textsuperscript{1} may be the case in treatment of drug abusers. If sent to the psychiatric wing, the abuser may redefine himself as being mentally ill, a condition which existed previous to his drug usage. On the other hand, if confined to a general hospital wing, he may regard himself as ill, but not mentally. The role of the physician may be a salient factor in bringing about these different responses.

Related Literature

Literature relative to the present study should come from several perspectives if a total picture is to be constructed of the interaction in a patient-doctor confrontation involving drug abuse. Consequently, this section will be divided into two parts. The first part focuses on the relationship between the potential hallucinogenic drug user and his perceptions of the drugs with which he may become involved. This approach is based on the pharmacological effects of the drugs as well as the sociological influences on the interpretation of these effects as being "good" or "bad." The second part concerns itself with those factors related to the physicians' views on the use of those drugs under non-medical conditions and without medical supervision, as is found in

\textsuperscript{1}ibid.
many instances of hallucinogenic drug use. The concern is not only on the actual usage, but also the underlying social-psychological reasons that would promote such usage.

Perception of hallucinogenic drug effects by users

The perception of the various effects of drugs rests on several factors. Consequently, two areas need to be explored if all possible variations of these effects are to be taken into account. This involves an explanation of the pharmacological aspects as well as the sociological influences involved in the intake of such drugs.

Pharmacologically, the effects of these drugs are dependent on two basic variables—toxicity and dosage. Dosage refers to the amount of the drug taken, while toxicity relates to the strength of the agent being ingested. Thus, it is possible to take a single dose and receive the desired effects, provided the toxicity is high enough. Generally speaking, the higher the toxicity, the greater the variation in the perceived effects. In terms of the class of drugs under consideration (the hallucinogenics), Bloomquist\(^1\) states that this variation

results in a greater incidence of "bum trips." Becker\(^1\) notes that, for the weaker hallucinogens such as marihuana, specialized techniques for maximizing these effects are brought into play. Even after learning these specialized techniques, neophytes report that they perceived little, if any, effects from the drug and felt that further use was futile. Baudelaire\(^2\) declares that many first-time users of hashish complained that the effects were too slow in developing and that when they did appear the neophyte was taken by surprise. It must be remembered, however, that hashish is a refined portion of the cannabis plant consisting of the resin from the flowering tops and, as such, is extremely potent. One should therefore consider it to be on the level of the higher hallucinogens, such as D-lysergic acid diethylamide tartrate 25 (LSD). In any case, Becker\(^3\) feels that, although these effects are undoubtedly present, the neophyte does not regard them as such until they are pointed out by more experienced users. Once these effects have been pointed out, they must be redefined as pleasurable since the


\(^3\)Becker, Outsiders, op. cit., pp. 46-58.
first-time user frequently experiences panic, toxic psychosis, and simple depression. \(^1\) Becker\(^2\) attributes this to the fact that these "first-time" users have simply not internalized a set of shared understandings common to a community of users of the drug (a subcultural interpretation of the effects), involving the effects as being pleasurable and actually the end for which the drug was taken. Becker further states:

> What they tell him carries conviction because he can see that it is not some idiosyncratic belief, but instead is culturally shared. It is what everyone who uses the drug knows.

Cohen\(^3\) views this person-to-person level of interaction as being the most powerful inducement to try drugs, simply because it carries the conviction of personal experience from the experienced user to the budding neophyte. ("It's harmless! I've tried it.") Since Carey\(^4\)


asserts that most drug usage begins in small, intimate
groups of friends, Cohen's assumptions would seem to be
valid. This view of reactions of an unpleasant nature
being found predominantly in the novice drug experimenter
is also voiced by Cohen,\(^1\) who observes that these people
either have no effects or an overwhelming loss of con-

As usage increases, Rosevear\(^2\) and Aldrich\(^3\) both main-
tain that marihuana users learn to seek a level of high-
ness and remain there. The tendency to go beyond the
dosage that produces pleasurable effects is therefore
reduced.

As Cohen\(^4\) remarks, this ability to control the "high"
allows "the user to regulate the degree to which he will
fantasize or enjoy his altered perceptions." Becker\(^5\)
discloses several instances in which individual users were
admittedly "high," but nonetheless were able to carry out

\(^1\)Cohen, Sidney, The Drug Dilemma. New York: McGraw-

\(^2\)Rosevear, John, Pot: A Handbook of Marihuana. New

\(^3\)Aldrich, Michael, "Untitled Essay." Cited in Hart,

\(^4\)Cohen, The Drug Dilemma, op. cit., p. 54.

\(^5\)Becker, Outsiders, op. cit., p. 71.
complicated tasks. The "Mayor's Committee on Marihuana" states that intellectual impairment is greater among experimenters than long-time users, thus indicating a habituation factor resulting in the ability to compensate for the drug's effects.

In discussing the more potent hallucinogens, a series of groupings will be proposed along the lines of the principle of cross-tolerance. That is, the use of one drug in any particular group produces a tolerance to other drugs also found in that group. For example, a constant user of 4-methyl-2, 5-dimethoxy-methyl-phenethylamine (hereafter referred to as "STP") will perceive no unusual effects with an equal dosage of mescaline. Thus, a nominal classification based on this principle will be as follows: Group 1--STP and mescaline; Group 2--N,N-dimethyltryptamine (hereafter known as "DMT") and psilocybin; and Group 3--d-lysergic acid diethylamide tartrate 25 (hereafter known as "LSD").

Use of these drugs differs somewhat from the lesser hallucinogens in that, although they are all psychotropic in nature, there are differences in the modal manner of

---


ingestion suggesting that it is not learned behavior as in the case of marihuana. For example, the predominant method of ingestion is oral, indicated by simply eating a capsule or cube soaked in a solution containing the appropriate dose. Thus, the neophyte would not have to learn any special techniques from a more experienced user. In addition, the effects of these drugs are so strong that Cohen\(^1\) writes of instances in which individuals perceived these effects as though they were going out of their minds—or going mad—until the explanation of the effects as being drug-induced was offered by others. Thus, the connection was made and a reference point for interpretation of these effects was established.

Another important differentiation to be made is that tolerance rapidly develops with the LSD-type drugs, but not at all with cannabis.\(^2,3\) Thus, the individual must be constantly increasing the dosage of LSD-type drugs if he is to receive the same effects each time the drug is used.

Within these groups of hallucinogenic drugs, impor-

---

\(^1\)Cohen, *The Drug Dilemma*, op. cit., p. 18.


tant differences exist as to the intensity, as well as the duration, of the effects once the drug has been ingested. For example, the drugs in Group 1 (STP and mescaline), although differing in the length of the intoxication, induce less disorientation than is found in other groups.

Experimenters, including novices, remark that although there is some distortion, both visual and auditory, it is not severe enough to be incapacitating and normal functions can be carried out under their influence. Other users not only mention that these distortions were of low intensity, but that in some instances objects appeared more drab and less colorful than in their natural states. One therefore may be able to interpret these as "normal illusions" which present images in misleading manners, rather than true hallucinations, which would be the perception of objects, or the experiencing of sensations, which have no basis in reality. Huxley sums this perspective by saying that:

Confronted by a chair which looked like the Last Judgement—or, to be more accurate, by a Last Judgement which, after a long time and with considerable difficulty, I recognized as a chair...
Those drugs in Group 2, namely DMT and psilocybin, contain characteristics found in both the first and last groups. For example, the most common method of ingestion associated with DMT is by smoking, much as in the case of marihuana. The DMT is simply mixed with parsley, allowed to dry, and rolled into the shape of cigarettes. Following ingestion, the effects are felt within two minutes, reaching a peak within fifteen minutes and declining thereafter until, thirty minutes after ingestion, none remain. It is because of these short-lived, fast-acting effects that the drug is sometimes called the "businessman's trip." Although the Commission considered DMT to be a mild hallucinogen, Goldstein is of the opinion that the drug not only produces hallucinations and visual aberrations, but also a loss of ego, in which the mind seems to be detached from the body. Thus, the label of "mild" would seem to be somewhat arbitrary.

Psilocybin, the second drug found in Group 2 is chemically related to DMT and Goldstein also asserts that it produces similar effects upon ingestion, the main

1Lingeman, op. cit., p. 64.
difference being the length of the effects as well as the manner in which it was taken. It is the longest-lasting of these drugs, sometimes being felt for as long as two days, and is effective only when taken orally.¹

The single drug found in Group 3, namely LSD, presents a different set of factors which differentiate it from those found in the preceding groups. Generally speaking, the experience proceeds through three stages of intoxication. The first of these has been called an "orgy of color," which is characterized by intensification of both color and light, followed by profound changes in existing visual forms.² During this preliminary stage, the individual is still capable of knowing where he is and, more importantly, who he is. Thus, he recognizes that the altered perceptions he is experiencing are the effects of the drug. During the second stage, these hallucinations are supplemented by "depersonalization, dissociation, derealization, abnormal detachment, body image distortion or alteration."³ According to Carey,⁴

¹Parnsworth, Dana, "The Drug Problem Among Young People." West Virginia Medical Journal, LXIII (December 1967), 437.


³Ibid.

⁴Carey, The College Drug Scene, op. cit., p. 126.
this stage is the most dangerous since it dissolves the boundaries of the ego, resulting in what Aldrich\(^1\) terms "ego-loss." The final stage of the intoxication concerns the retrospective impressiveness of the drug experience, in which the individual reestablishes his "ego" and expounds on the value and uniqueness of the experience he has just had.\(^2\)

This "value and uniqueness" is not necessarily connected with the type of trip, or experience, that the individual has experienced, since Carey\(^3\) maintains that experienced users feel that they benefit from "bad trips" as well as "good ones." However, one may assume that among neophytes the experience would most likely have to be positively oriented and pleasurable if continued experimentation is to take place. Thus, a prerequisite for a "good trip" might include adequate preparation, with the specific intent of rendering the drug experience rewarding and pleasurable.

Involved in this "adequate preparation" are two related concepts, those of "setting" and "set."

Although some authorities suggest that the "setting"

\(^{1}\)Aldrich, op. cit.

\(^{2}\)Solomon, op. cit., p. 204.

\(^{3}\)Carey, op. cit.
concept is the less important of the two, Savage\(^1\) argues that unless the LSD experience takes place

\[\ldots\text{in a secure setting, with sufficient emotional support where the subject feels safe to encounter the bizarre and often powerful manifestations of his own mind unharnessed by tests, interpretations and the coldly precise scientific analytical attitudes, the only result can be confusion and paranoia.}\]

Solomon\(^2\) defines "setting" as "the environment, social, physical, emotional, to the milieu of the sessions." The emphasis on any or all of these factors would be determined by the type of sessions the participants wished to be involved in. For example, under controlled laboratory conditions, the emphasis would be on neutralizing those factors that would tend to cloud the test responses. However, most interpretations of the available data indicate that laboratory settings in which these drugs are used are in the minority.\(^3\) Consequently, many of these sessions are carried out with the express purpose of enhancing any effects through alteration of the physical, social, or emotional portion of the setting. However, this enhancement of the effects does not necessarily imply that there is little emphasis placed on control at these sessions.


Carey\(^1\) feels that, because of fears of "bad trips," many individuals will not take these LSD-type drugs except in very controlled settings--implying the presence of an experienced individual (known as a "guide" or "trip conductor")--and in settings in which sudden changes in behavior of the individuals participating as well as the physical environment are kept to a minimum.

Closely related to this concept is that of the individual's psychological predisposition towards the more potent hallucinogens, more commonly known as the "set." Although basically involving all that the individual knows about the drug and its effects, the manner in which these effects became known may provide the novice with different emphasis on different effects, depending on who he interacts with.

As previously stated, Cohen\(^2\) is of the opinion that face-to-face interaction is the most powerful inducement to try drugs since it carries the idea of personal experimentation on the part of the individual expounding the benefits of usage. Blum,\(^3\) although implying that this

\(^1\)Carey, op. cit., p. 39.

\(^2\)Cohen, "Information and Misinformation About Drugs," op. cit., p. 289.

level of communication is important, emphasizes the type of people involved in the usage as being the determining factor in the development of an individual's expectations of the effects. In both professional and informal groups, what LSD-experienced friends initially transmit is the knowledge that the drug produces heightened sensations.¹

However, the interpretations given to these sensations is dependent, according to Blum,² on the level of professionalization characteristic of each group. Thus, he notes that professional experimenters transmit the knowledge that LSD is a psychotomimetic (drug) producing sensory distortions. Conversely, the informal professional and black-market people were likely to learn that it produced heightened sensations, artistic or personal enhancement, and euphoria.³

In addition to the impressions one receives from those around him concerning the drug's effects, the possibility that these impressions may lead to a predisposition to experience a "bad trip" may be considered since Solomon⁴ remarks that any expression of anxiety in the person who is giving the drug, in the form of hesitancy about

---

¹Blum, Utopiates, op. cit., p. 98.
²Blum, Students and Drugs, op. cit.
³loc. cit., p. 95.
administration or about "inducing psychosis," seems likely to render the experience anxiety-ridden for the subject. Pointing to additional sources of this occurrence of anxiety, Sandison\(^1\) implies that these largely depend on what the individual is told beforehand, as well as rumors and myths among others, or even in the press, about hallucinogenic drugs.

Although Cohen,\(^2\) as well as Redl,\(^3\) assigns primary importance to the personal level of the transferral of drug knowledge, other sources exist which allow the neophyte or experienced user to become aware of a drug's effects without actually experiencing them.

Among the older, more well-known hallucinogens--such as psilocybin, mescaline, and marihuana--thousands of articles, books, and myths exist describing the effects of these drugs in highly descriptive (if somewhat unscientific) terms. Many of these are religious in nature, implying that the user will see the "One Great Truth" or "God" while under the influence of the drug. In any case, most sources deem the experience worthwhile simply because of the personal insight gained from the experience.

\(^1\)Sandison, cited in Solomon, ibid.

\(^2\)Cohen, "Information and Misinformation About Drugs," op. cit.

In terms of the newer hallucinogens, including LSD, DMT, and STP, historical accounts of these drugs simply do not exist due to their recent development. The respective users must, therefore, turn to other areas, including newspaper or magazine articles. According to Braden,¹ many newspapers and magazines tend to emphasize the negative aspects of drug usage by focusing on the bad effects. There may be several reasons for this somewhat biased accounting, the most obvious of which is that this type of reporting sells newspapers. Inherent distortion may exist because of the organization of the newspaper itself. That is, most newspapers are organized with a group of specialists to handle areas of public interest. Conversely, few newspapers have specialists in drug knowledge or drug-abuse related problems. Braden theorizes that sources for articles on drugs are most likely to be those directly involved in it, such as the police or physicians. These groups usually emphasize the avoidance of LSD-type drugs due to the inherent dangers in their use. Obviously, this does not stop people from taking the drugs, but Braden feels that such emphasis on negative effects may possibly create a self-fulfilling prophecy characterized by a subliminal anxiety that may

result in either a bad trip or a latent panic reaction. Since LSD subjects are so highly suggestible, as is well known, it could be that they oblige the doctors and the press by doing exactly what they were told they would do. They flip out.\(^1\)

If the individual feels that the setting is sufficiently neutral and there are others present to help him should he develop problems, he will probably take the drug. As noted previously, the effects, when they do appear, are of such intensity that they do not need to be pointed out to the beginner. Thus, any interactional communication is not based on the learning of a specialized technique, but rather on efforts to control these effects, thereby avoiding a "bad trip." One of the most important of these is the ability to "go with the current" and avoid fighting the effects of the drug in an effort to regain control. This fighting is analogous to the attempt to maintain the "ego" during the second, or "ego-loss," stage. Evidently, the more rigid the psychic arrangement of the individual, the more resistance is put up and the more toxic the reaction.\(^2,3,4\)

The intensity of this reaction is dependent upon

\(^1\)loc. cit., p. 410
\(^2\)Solomon, The Marihuana Papers, op. cit., p. 73.
\(^3\)Carey, op. cit.
\(^4\)Aldrich, op. cit.
several factors, including the presence of a guide. If present, and experienced, guides are usually successful in alleviating these fears because of the hypersuggestibility of the intoxicated state.\(^1\) However, this hypersuggestibility may also be a factor in the causation of a more severe reaction, since reactions indicating panic--from those with whom the individual took the drug or who were with him as the second stage began--may cause this individual to experience even more panic.

If this guide is not experienced enough to control the situation from developing into a general panic reaction and the drug has been taken under conditions maximizing the effects and minimizing control of the situation, a reaction severe enough to demand hospitalization may be the logical outcome.\(^2\)

**Factors influencing the doctor-patient confrontation in an emergency room situation**

Once the individual begins to develop anxieties following the intake of a hallucinogenic drug, Becker\(^3\) theorizes that

He will probably be brought to a physician for treatment. Most probably be brought to

\(^1\)Cohen, *The Drug Dilemma*, op. cit., p. 33.


a psychiatric hospital if one is available, if not, to a hospital emergency room, where a psychiatric resident will be called once the connection with drugs has been established, or to a private psychiatrist.

One can assume that a user's reaction to the drug would have to be quite severe, since Meyer\textsuperscript{1} comments that LSD-oriented groups prefer to treat their own people—fears of exposure or of prosecution for possession of these drugs under existing state laws usually isolate these groups or individuals from medical attention.

A theoretical perspective on the interaction involved in these doctor-patient relationships has been put forth by Parsons,\textsuperscript{2} who theorizes that there are a series of expectations which are relative to the assumption of a "sick" role by an individual and that the relationship must be viewed through these. The first involves the exemption of the individual from normal social roles (i.e., a "well" individual) and the assumption of a legitimized role as a "sick" person. Upon assumption of this role, this individual must also assume several compatible responsibilities, including: (1) acceptance of outside

\begin{footnotesize}

\end{footnotesize}
help in combating this illness (since he cannot be expected
to get well by an act of decision or will); (2) a wanting
to get well and, therefore, assume normal duties and
roles; and, finally, (3) the recognition of himself as
being ill and the consequent seeking-out of professional
help and cooperation with these people in becoming well
again.

Therefore, one can look at any particular form of
illness as being a series of levels of treatment, from
diagnosis of the illness (which may or may not include
acceptance of the role of "sick" by the individual con­
cerned) to complete recovery and resumption of normal
duties and roles. Thus, it would seem logical that, of
these levels, the first--diagnosis of some form of illness
which is present in an individual--would seem to be of
critical importance, since all further treatment is based
on what the illness or its underlying causes are seen to
be. If the individual is capable of coming to a hospital
and explaining to the doctor which is his specific com­
plaint, he therefore already has fulfilled several of the
conditions necessary to assume the patient role, namely,
recognition of his illness and the seeking of outside help
in an attempt to cure it. However, should the individual
be involuntarily brought to the hospital and be incapable
of expressing the ailment to a physician, other methods
would have to be used in determining the exact cause of
his illness.

One of the more important of these methods might be previous experience with illnesses which appear to be closely related to the one under consideration. Thus, for example, a pain in the lower abdomen may signal a stomach disorder or an appendix about to burst. In either case, the physician develops a series of generalizations based on the ascertainable symptoms. The term "set" could be applied in this instance, as well as "generalizations," since in both cases it implies what the physician knows about the disease, either from previous experience or from colleagues who have treated the same type of illness.

In terms of the subject under discussion (i.e., hallucinogenic drug abuse, as well as overdoses), physicians tend to view any use of drugs (any drug) not prescribed as drug abuse. The position on this matter taken by the American Medical Association\(^1\) is expressed thusly: "Drug abuse is taking drugs without professional advice or direction." Consequently, non-medical drug use is, in the medical viewpoint, abuse, regardless of the toxicity or characteristics of any particular drug. Since most hallucinogenic drug intoxications take place without

\(^1\)American Medical Association Committee on Alcoholism and Drug Dependence, " Dependence on LSD and Other Hallucinogenic Drugs." Journal of the American Medical Association, CCI (October 2, 1967), 48-50.
professional consultation and without professional direction, the application of the term "drug abuser" to users of these drugs would seem to be quite appropriate.

Closely related to the application of the term "drug abuser" is the concept of drug abuse as being the manifestation of specific forms of medical pathology. That is, the non-medical use of drugs is the expression of a personality disturbance,\(^1\,2\,3\) and may precipitate temporary, but potent, psychotic episodes.\(^4\,5\,6\) Thus, the abuser of hallucinogenic drugs may be viewed by physicians as being a "disturbed personality," since Carey\(^7\) explains that the important element in the medical viewpoint is the person-


\(^2\)American Medical Association, Committee on Alcoholism and Drug Dependence, op. cit.


\(^7\)Carey, op. cit., p. 193.
ality of the user, with special attention being given to the unstable personality.

Continuing along these lines, Becker\(^1\) is of the opinion that physicians feel that people probably do not use drugs without the physician's consent unless they are suffering from a severe underlying personality disturbance, and that the use of these drugs may allow repressed conflicts to come into the open where they will prove unmanageable. The degree of unmanageability may be an influential determinant in the manner of treatment. Herman and Fox\(^2\) declare that preliminary treatment in cases of wild, unmanageable behavior is on the basis of preventing the individual from hurting himself, thus indicating psychiatric hospitalization. More importantly, this unmanageability, although interpreted as being related to an adverse hallucinogenic drug reaction, may be incorrectly labeled as a psychotic episode, since some authorities maintain that there are several types of adverse reactions. The first two of these, the "psychotic adverse reaction" and the "non-psychotic adverse reaction," differ only in the intensity of the experience and the degree of reality-contact expressed by the individual experiencing the

\(^1\)Becker, "History, Culture, and Subjective Experience," op. cit., p. 169.

reaction. Thus, the psychotic adverse reaction may be characterized by

an intense negative experience of fear or nightmarish terror to the point of panic, complete loss of emotional control, paranoid delusions, hallucinations, catatonic features and, perhaps, profound depression and sense of meaningless. Such states are usually acute...

However, differences exist between this form of reaction and that of the second type. Thus, the non-psychotic adverse reaction is defined by the Commission as:

. . . (a condition) in which the person may experience varying degrees of tension, anxiety and fear, unpleasant illusions, depression and despair. Inappropriate or disordered social behavior may occur. This kind of reaction may differ from the first in the intensity of the experience and in the degree of control and 'reality contact' expressed by the individual. Such unpleasant experiences are commonly labelled 'bad trips' or 'bummers.'

Therefore, an individual who is brought to a hospital suffering from a hallucinogenic drug overdose, and expressing a complete loss of control, paranoia, visual or audient hallucinations (seeing or hearing things which are not present) or a severe expression of panic, may be judged to be undergoing a reaction which would be termed psychotic. Conversely, the same individual suffering from a "bummer"

---


2. Ibid.
--experiencing anxiety, fear, or tension, and yet maintaining some degree of control as well as contact with reality (possibly by realizing what is happening, where he is, or that the effects are those of the drug)--may be undergoing a reaction which would be one of the non-psychotic type. Based on these observations and theoretical perspectives, the following issues were raised: (1) choice of treatment; and (2) attitudes toward hallucinogenic drugs.

Choice of treatment

A physician's choice of treatment in the case of hallucinogenic drug overdose may be related, not only to the behavior exhibited by the individual, but to the social context in which the interpretation of this behavior takes place.

Since the setting in which this interaction would take place could be defined as a place where individuals are brought for medical treatment, people being admitted are already defined as "ill" or "sick" by the physician, who interprets the ailment and decides on a course of treatment.

Since many hallucinogenic drug-abusers are incapable of communicating, interaction between them and the physicians would seem to rely on interpretation by the physician of manifested behavior as being related to charac-
teristics held by the individual at the time of admission. Thus, since hallucinogenic drug abusers are often characterized by terms such as "wild," "irrational," or "looked the part," this would seem to support the view of many physicians that abusers are disturbed personalities and, therefore, the preferred mode of treatment for such persons is psychiatric care. Therefore, one may consider the possibility that a standardized relationship between physicians and their treatment of abusers may develop with experience. On the other hand, since the literature noted that there were two types of reactions to hallucinogenic drugs, a specialized relationship may develop in each of these cases. Thus, it would seem logical to assume that those physicians with experience in this treatment, although responding to the criteria of a hallucinogenic drug abuser, may not feel that he is a disturbed personality. Thus, treatment may be regular hospitalization rather than psychiatric care.

The position taken in this paper is that physicians who are experienced in the treatment of hallucinogenic drug abusers will interpret behavior exhibited at the time of admission as being of the non-psychotic variety (i.e., not a disturbed personality) and will recommend non-psychiatric treatment while those with little or no experience, responding to ideal expectations and generalized interpretations, will treat according to the disturbed-
personality perspective.

Attitudes toward hallucinogenic drugs

A physician's attitude toward the non-medical, non-prescription usage of hallucinogenic drugs may be influenced by the amount of treatment experience he has in the area of treatment of overdoses. Thus, since these hallucinogenic drugs are being taken without medical controls, they may be viewed by these physicians as "abuse," but, when this intake results in the presentation of irrational behavior, they may be redefined as being "harmful."

Thus, experience with hallucinogenic drug abuse may result in not only a justification of these attitudes, but in a standardization of attitudes which would encompass all hallucinogenic drugs as being "harmful," since only the negative results ("bad trips") are seen by a physician in an emergency room.

One may therefore consider that the more experience a physician has in the treatment of hallucinogenic drug overdoses, the more polarized his attitudes towards the non-medical, non-prescription usage will be. The opposite may also be true since, by gaining experience in the treatment of these overdoses, the physician may develop a state of sensitivity which would enable him to note differences in these hallucinogenic drugs and feel, therefore, that some may not be harmful, although usage did take place
under non-medical, non-prescription circumstances.

The position taken in this paper is that physicians with experience will have developed attitudes toward these hallucinogenic drugs as being "Not Harmful" when used under the aforementioned conditions, whereas physicians with no experience in the treatment of hallucinogenic drug overdoses will regard these drugs as "Harmful."

Hypotheses

Hence, from these research issues, the following hypotheses were formulated, with the first set of hypotheses dealing with the first issue, possible differences in the application of a specific diagnosis, as well as physicians' choice of treatment in the case of hallucinogenic drug overdose.

General hypothesis A

There will be a direct relationship between the experience a physician has in the area of treatment of hallucinogenic drug overdoses and the application of a specific diagnosis in these cases.

Research hypothesis 1.--Physicians with experience in the treatment of hallucinogenic drug overdoses will apply a non-deviate interpretation of the behavior exhibited at the time of admission.

Research hypothesis 2.--Physicians with no experience in the treatment of hallucinogenic drug overdoses will apply a deviate interpretation of the behavior exhibited at the time of admission.
General hypothesis B

There will be a direct relationship between the amount of experience a physician has in the area of treatment of hallucinogenic drug overdoses and the choice of treatment chosen for these hallucinogenic drug overdoses.

Research hypothesis 1. -- Physicians with experience in the treatment of hallucinogenic drug overdoses will tend to favor a non-deviate rationale as a basis for treatment of these drug users.

Research hypothesis 2. -- Physicians with no experience in the treatment of hallucinogenic drug overdoses will tend to favor a deviate rationale as a basis for treatment of these users.

In reference to the second issue, the research emphasis is on possible differences in viewpoints toward the non-medical, non-prescription usage of hallucinogenic drugs.

General hypothesis C

There will be a direct relationship between the amount of experience a physician has in the area of treatment of hallucinogenic drug overdoses and the views he holds toward the non-medical, non-prescription use of these hallucinogenic drugs.

Research hypothesis 1. -- Physicians with experience in the treatment of hallucinogenic drug overdoses will tend to favor a non-deviate view toward the non-medical, non-prescription use of these drugs.

Research hypothesis 2. -- Physicians with no experience in the treatment of hallucinogenic drug overdoses will tend to favor a deviate view toward the non-medical, non-prescription use of these hallucinogenic drugs.
CHAPTER II

METHODOLOGY.

This chapter is devoted to a discussion of the various aspects concerning the methodology involved in the collection of data. As such, it will be divided into three sections, each concerned with a different perspective of the methodology. The first section will focus on the selection of a site and sample, as well as preliminary data in the form of statistics gathered from law enforcement agencies, educated guesses and other relevant sources, including those emergency room statistics available from the hospital in which the survey was conducted. A presentation of the development of the research instrument is also included. The second section will discuss the method of introduction of the research instrument into the hospital organization, including the problems encountered and the discussion (and rejection) of alternative methods of data collection. The final section will analyze the characteristics of the sample, based on the returned or usable questionnaires.

Site and Sample

Actually two sites were chosen for this study, the survey hospital and the communities which surround it.
Typical of these is the community of Royal Oak, located twelve miles from a large metropolitan area. Statistically speaking, the law enforcement agencies in this community recorded no minor (under 17) arrests in 1966, followed by 6 in 1967, and 27 in 1968. In the adult category, there were again no arrests in 1966, with 27 and 52 being recorded for the years 1967 and 1968, respectively.

Statistics from the communities surrounding Royal Oak would seem to reinforce the contention among some that drug abuse in the area is on the increase. Numerically, these cases have increased from 77 in 1967 to 370 in 1968, with the number of drug-related warrants rising from 19 in 1966 to 196 in 1968. In most of these cases, marihuana was the drug most often involved in these drug-law violations, but LSD and amphetamines were also common. Interestingly, heroin and other narcotic drugs were not mentioned.

Unfortunately, there are no accurate statistics available for the school districts located within these communities. Therefore, estimations are no more than educated guesses. In these cases, sources indicate that as many as 50 percent of the students within these systems may have tried drugs at least once, with as many as 20 percent being classified as hard users.

Community response to this increase has resulted in increased law enforcement and detection of abusers. More
importantly, it has resulted in the establishment of drop-in centers where young people with drug problems can come for help or treatment in the case of overdoses, rather than being forced to go to a hospital emergency ward.

Thus, the choice of this area as being a site within which an exploratory study could be conducted would seem to be justified in view of: (1) the presence of these illegal drugs; (2) a substantial increase in this usage among young people in this area during the past three years; and (3) the presence of alternative methods of treatment, available through drop-in centers.

Located within the community of Royal Oak, and serving the general area in the capacity of a multi-service organization, is William Beaumont Hospital, the actual site of the survey. Preliminary analysis indicated that, although other hospitals exist in the area, these are either much too small (privately owned) to contain an emergency room or are located beyond the edges of these communities (thus serving other communities rather than those in the survey area).

Statistically, indications are that the hospital has been used as an alternative to taking drugged individuals to drop-in centers. For example, no cases of cannabis overdoses were recorded until 1970, when 3 were noted. Concerning other hallucinogens, from 1965 to 1968 none were recorded, the years 1969 and 1970 included 4 and 18,
respectively. (See Appendix A.) More importantly, the organization of the hospital itself presents a set of alternatives to treatment. Physically, the hospital contains 10 floors, with 720 beds. These floors, or wings, are designated according to the type of treatment needed by the patient. For example, there are pre- and post-operative surgical units, intensive care facilities, outpatient clinics and labs. More important from the perspective of this study is that the hospital is equipped with a psychiatric wing.

The population in the study is defined as physicians who are members of the medical staff located within the hospital. Although numbering 378, other criteria were needed since many of the staff doctors were in supportive tasks such as Clinical Pathology, X-Ray, or Anesthesia, and would therefore not be involved in the direct treatment of abusers. Additionally, others were not included, for although they were still listed on the staff rosters and had full major privileges, they were in semi-retirement and were consulted on rare cases, none at the emergency room level. Finally, others were left out, for they did not have full major privileges and were allowed only to admit patients that they had seen outside the hospital. More importantly, they were not placed on the rotational emergency room roster and, again, would not be involved with treatment.
Therefore, although the population defined in the study included all the physicians on the staff roster, the actual sample (N=255) included only those who met the following criteria:

1. Member of the hospital staff
2. Full major privileges, including admissions through emergency rooms to other levels of treatment
3. On rotational duty requiring Emergency Room call

Research instrument

As previously stated, the instrument developed for the collection of data was in the form of a questionnaire, in which the doctors were asked to check the appropriate space or fill in the correct box and return. Since sources at the survey hospital indicated that lengthy questionnaires would often be enough to discourage doctors from participating in the study, the first consideration was the shortness, not only of the questionnaire, but of the questions contained therein. In line with this thinking, it was also decided to reduce the number of perspectives on which the study would focus by limiting the questions to several areas, including: (1) treatment of "drug abusers"; (2) attitudes of doctors toward users in terms of deviant behavior; and (3) views of doctors in terms of "harmful" or "not harmful" categorizations of several varieties of
hallucinogenic drugs (mentioned as "Groups 1, 2, and 3" in Chapter I).

The primary measure in determining the forms of treatment of "drug abusers" was in the form of the following question:

In those cases where hallucinogenic drug abuse was known, treatment included which of the following?

- Release after emergency treatment for drug's effects, no referral to psychiatric services in hospital for consultation.
- Referral to psychiatric services following emergency treatment.
- No treatment, no referral.
- Other treatment—please specify.

The question was structured in such a manner that the doctor, knowing that the patient was experiencing a hallucinogenic drug overdose, could not have confused this state with other forms of illness (for example, grand mal seizure). Thus, the doctor could respond to the question by checking the appropriate box indicating the type of treatment he felt that the individual was in need of. If the problem was seen to be physical, the first choice was indicated; if psychiatric, the second was chosen. The third choice was self-explanatory, but the fourth, that of "other treatment," deserves explanation. This was included to make the question "open-ended," since the possibility existed that there were other options available to doctors in terms of treatment that the investigator
was unaware of. Additionally, this "open-endedness" provided an opportunity in the form of a check, since it was felt that other forms of treatment would be characteristic of other forms of drugs. This prediction proved to be only partially true, since doctors checking this box felt that hospitalization was needed in preference to release. However, mention of drug-related illnesses from using some types of "needle-injected" drugs may account for some of the hospitalization answers.

Treatment was also measured in terms of post-emergency treatment. Accordingly, the question was as follows:

Post-emergency treatment was on the basis of which of the following?

_____ Simple anxiety states induced by the drug's action.

_____ Mental disorders existing prior to usage.

This question took the perspective that if the individual were hallucinating severely enough to be hospitalized, one of two options was open to the doctor. Somewhat related to the first choice in the previously noted question, this treatment could be on the basis of simple anxiety states (which would be in line with the doctor's view of the user as a non-deviate), characterized by routine placement in a non-psychiatric "wing." The other answer, involving treatment based on previous mental disorders, would coincide with the view of the user as being a deviate, and would result in treatment or hospitalization in
a psychiatric wing.

The second area to be focused on, that of the attitudes of doctors toward users as being "deviant" or "non-deviant" was measured by two questions. The first of these involved opinions as to the state of the user's mental health at the time of admission. Thus:

Would you agree that most users coming into this hospital have a past history of mental disorders at the time of admission?

_____ Strongly agree
_____ Agree
_____ Unsure
_____ Disagree
_____ Strongly disagree

Scaling this question from "Strongly agree" to "Strongly disagree," it was hypothesized that those doctors regarding abusers as deviants (and who had little actual experience in treatment) would check one of the first two, thus reconfirming a viewpoint that these abusers were deviants, possibly resulting in psychiatric hospitalization upon admittance. At the same time, those checking "Disagree" or "Strongly disagree" would present the attitude that users were non-deviant, which hypothetically would be those doctors with experience in treatment.

These attitudes were also measured in another perspective, namely, that of the actions of the hallucinogenic drugs used by the abusers as expressive indicators of underlying mental problems. Accordingly:
Would you agree that the action of these hallucinogenic drugs allows underlying mental conflicts to be expressed in psychotic behavior?

___ Strongly agree
___ Agree
___ Unsure
___ Disagree
___ Strongly disagree

Scaled much the same as the previous question, the emphasis here, again, is on the behavior exhibited by the abuser at the time of admission. Obviously, since the hypothesis states that those doctors with little experience in treating drug abusers will tend to view these people as being deviates (having mental problems, rather than physical—non-deviant—ailments), and that they would agree that these people have a past history of mental disorders, they would also agree that these disorders could be visually expressed in terms of psychotic behavior. Conversely, those with much experience would feel that behavior exhibited would not be a mental problem but the effects of the drug.

Finally, the views of the survey doctors toward the drugs in Groups 1, 2, and 3 were recorded by the presentation of these drugs in a list. Physicians were then asked to rate these drugs as "Harmful," "Not Harmful," or "Don't Know." (See Appendix B.)
Research Method

The choice of an instrument by which the data could be gathered was based on several criteria, the most obvious of which was the need to gather a large amount of data in a relatively short period of time. Since the data were to include all physicians meeting the aforementioned criteria, one of three choices was offered.

The first of these would be an attempt to administer the instrument at a time when all the physicians were together, such as at a staff meeting. The questionnaire would be passed out, the physicians filling it out and returning it to the investigator while still at this meeting. This procedure was rejected; while it allowed all staff members the opportunity to participate, it also allowed those who were on the staff (in the capacity of clinical and supportive specialists) who had not treated drug abusers in an emergency room situation to fill out the questionnaire, thus possibly biasing the final results.

The second choice was the possibility of employing personal interview techniques and interviewing each doctor who met the three criteria. These could be gathered from a roster of the hospital staff, and could be interviewed with a set of structured questions which would allow the interviewer to probe for relationships. This was quickly discarded, since it would have been impossible to make
appointments with each doctor during his office hours and conduct the interview. Interviews could not have been conducted at any other time due to operating room schedules, patient rounds, etc.

Thus, since the instrument was to be a questionnaire in any case, it was decided to investigate the possibility of distribution by some means available within the hospital.

Since the subject hospital contained a mail room where doctors could check on current correspondence placed in mail slots (each with the doctor's name on it), it was decided that this would be the means of dissemination. Problems were immediately encountered, since many of those subject doctors shared mailboxes with others who may or may not have been subjects themselves. Accordingly, it was decided to provide a removable label with the doctor's name on it on each questionnaire before placing it in the mailbox. Upon completion, the tag was to be removed before returning it. In order to keep the doctor from having to carry the questionnaire out of the room in order to return it, labeled "return" boxes were placed conveniently next to the mailslots. These were opened after two weeks and the enclosed questionnaires removed.

Doctors were asked to check the appropriate space if they felt that a particular drug was "Harmful," "Not Harmful," or "Don't Know" if they had no knowledge of that
drug being used to produce hallucinations. Since many of these drugs had received wide publicity, especially marijuana and LSD, it was decided to place several lesser-known hallucinogens in the group to attempt to determine if the doctors would view these as being harmful in light of little knowledge of that particular drug's effects. In addition, a "dummy drug" was included to serve as a check against the possibility that the doctors would regard all these drugs as being harmful, per se. "Bronze," to the author's knowledge, is a hallucinogen whose usage and range is so limited as to be non-existent. Two cities were mentioned to the author as being sites for this usage, one in California, the other being Grand Rapids, Michigan. Although this was a period of four years ago, efforts were made to determine the possibility that the drug was still in use and had possibly moved into the areas surrounding the survey hospital. Conversations with police as well as those directly involved in the "drug scene" indicated that it was not even known, much less in use. Thus, for all practical purposes, the drug was regarded as a "dummy."

These are the areas which will be used in the confirmation or rejection of the various hypotheses stated in an earlier section of this paper.

Characteristics of Sample

Although the selected sample totaled 255, usable or
returned questionnaires accounted for only 106, indicating a return of 41 percent.

Among the respondents, two groups of almost equal size appear in response to the query concerning actual treatment of abusers. As seen in TABLE 1, of the total 106 who returned the form, 50.94 percent (N=54) affirmed that they had actually treated drug abusers admitted to the emergency room, while 49.06 percent (N=52) indicated that they had not.

TABLE 1.—Physicians' experience in treatment of hallucinogenic drug abusers

<table>
<thead>
<tr>
<th>Response of Doctors</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I have treated hallucinogenic drug abusers</td>
<td>54</td>
<td>50.94</td>
</tr>
<tr>
<td>No, I have not treated hallucinogenic drug abusers</td>
<td>52</td>
<td>49.06</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.00</td>
</tr>
</tbody>
</table>

In response to queries concerning their respective medical specialties, the largest number of respondents came from the Internal Medicine section of the survey hospital. This would seem rational since this section was the largest in the hospital. However, other sections are represented as illustrated in TABLE 2.

The survey physicians were also questioned as to the frequency of call duty (that is, duty in the emergency
TABLE 2.—Physicians' medical specialty within survey hospital

<table>
<thead>
<tr>
<th>Medical Specialty</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Medicine</td>
<td>38</td>
<td>35.85</td>
</tr>
<tr>
<td>Surgery</td>
<td>22</td>
<td>20.75</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>15</td>
<td>14.15</td>
</tr>
<tr>
<td>Ob-Gyn</td>
<td>9</td>
<td>8.49</td>
</tr>
<tr>
<td>Psychiatric Services</td>
<td>7</td>
<td>6.60</td>
</tr>
<tr>
<td>Neurology</td>
<td>2</td>
<td>1.89</td>
</tr>
<tr>
<td>General Practice</td>
<td>2</td>
<td>1.89</td>
</tr>
<tr>
<td>No Answer</td>
<td>11</td>
<td>10.37</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.00</td>
</tr>
</tbody>
</table>

room. The question was scaled from "Never on duty" to "More often than once a week." As indicated in TABLE 3, 27 percent of these physicians had never been on call duty in the emergency room. However, there were also those who were on call duty more often than once a week. The rest of the sample seemed to fall into the middle categories,

TABLE 3.—Frequency of call duty among survey physicians

<table>
<thead>
<tr>
<th>Frequency of Call Duty</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>29</td>
<td>27.36</td>
</tr>
<tr>
<td>Once a month</td>
<td>24</td>
<td>22.64</td>
</tr>
<tr>
<td>Every two weeks</td>
<td>16</td>
<td>15.09</td>
</tr>
<tr>
<td>Once a week</td>
<td>12</td>
<td>11.32</td>
</tr>
<tr>
<td>More often than once a week</td>
<td>24</td>
<td>22.64</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>.94</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.00</td>
</tr>
</tbody>
</table>
ranging from "Once a month" to "Once a week."

Due to the nominal nature of the returned data, analysis will be by the use of frequency and percentage techniques only, since analysis by more sophisticated techniques would be deemed inappropriate.
CHAPTER III

FINDINGS

This chapter is devoted to a discussion of the findings derived from the data collected for the study. As such (and since there are three primary research hypotheses), it will be divided into three sections, each concerned with a different perspective on the findings. The first section will focus on the findings involving possible relationships between physicians' experience in treatment and their attitudes toward hallucinogenic drug abusers. The second section concerns itself with a possible relationship between this experience in treatment and the choice of a post-emergency mode of treatment. Finally, the third section will complete this chapter with a discussion of the possible influence of this experience and attitudes toward the non-medical use of several classes of hallucinogenic drugs.

Findings Concerning the Relationship Between Physicians' Experience in Treatment and Attitudes toward Hallucinogenic Drug Abusers

The areas to be discussed will be divided into two categories—(1) actual experience as opposed to (2) no experience—in the treatment of hallucinogenic drug abusers. These two categories will then be used in deter-
mining differentiations in terms of views of hallucinogenic drug abusers as possibly having a previous history of mental disorders at the time of admission to the hospital, as well as levels of agreement concerning views that the use of hallucinogenic drugs allows underlying mental conflicts to be expressed visually as psychotic behavior.

This section concerns itself with those contentions indicated in hypothesis A, that a direct relationship will exist between the amount of experience a physician has in the area of treatment of hallucinogenic drug overdoses and the application of a specific diagnosis in these cases. More specifically, it was hypothesized that physicians who had treated hallucinogenic drug abusers would tend to view these individuals as non-deviate, this position being exemplified by responding negatively to the questions concerning the mental condition prior to, as well as at the time of admission. Conversely, those with no experience, possibly being forced to rely on what they read or heard about, theoretically would generalize and respond positively to the questions concerning the admitted individual's mental state. Thus, they would tend to agree that the abuser did indeed have a history of mental problems prior to admission. More importantly, they would agree that these mental problems became visually expressed as psychotic behavior due to the action of the various
hallucinogenic drugs available to the abuser. Thus, as opposed to the previous groups, the viewpoint would be in terms of the individual hallucinogenic drug abuser as being classified as deviate, at least in terms of his mental state at the time of admission to the hospital. 

As shown in TABLE 4, physicians who have treated drug abusers were generally unsure as to the existence of prior mental conflicts at the time of admission (38.5 percent). This "unsureness" may be accounted for by a hesitancy on the part of these physicians to generalize on the basis

TABLE 4.--Comparison of physicians' treatment experience and agreement of past history of mental disorders among abusers

<table>
<thead>
<tr>
<th>Physicians' Treatment</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>Physicians who have treated drug abusers</td>
<td>15</td>
</tr>
<tr>
<td>(N=54)</td>
<td></td>
</tr>
<tr>
<td>Physicians who have not treated drug</td>
<td>5</td>
</tr>
<tr>
<td>abusers (N=52)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25.6</td>
</tr>
</tbody>
</table>

a Inappropriate answers accounted for 2 of the respondents in this group.

b Inappropriate answers accounted for 26 of the respondents in this group.
of the limited amount of information available at the time of admission. Since many drug abusers are incapable of communicating either at a verbal or written level at the time of admission, those data usually come from those who brought the individual in for treatment, or at a later date from himself or someone related to him. More importantly, these individuals were not viewed as "non-deviates" by those physicians who had treated abusers, as was hypothesized. This group, categorized as "Low Agreement" in TABLE 4, contained only 17 respondents and accounted for only 32.7 percent of the respondents. Interestingly enough, those physicians who were in "High Agreement" and would therefore tend to view these individuals in deviant terms accounted for the least number of respondents (15) and the lowest percentage (28.8 percent), respectively.

Generally speaking, those physicians who have not treated drug abusers tended to follow the same pattern as found in those who had. Thus, the largest group of respondents was again found among those who tended to be "Unsure" as to the existence of prior mental conflicts at the time of admission (42.3 percent). As in the case of those who had, this may be explained in part by the lack of information or simply a lack of experience on the part of these individuals. Those physicians in the "Low Agreement" category again accounted for the second highest number of respondents (10), as well as the second highest
percentage (38 percent). The final "High Agreement" group contained the least number of respondents (5), as well as the smallest percentage (19.2 percent). It should be noted that these percentages represent only 26 of those in this group, leaving 50 percent of the data unaccounted for. Conclusions should therefore be made very carefully. Nonetheless, as was the case concerning those who had treated abusers, this group did not respond as was hypothesized. As noted, those viewing these abusers as deviates were in the lowest category, while those viewing them as non-deviates were second highest.

In summation, this question focused on the attitudes of physicians in terms of agreement or disagreement as to the possible existence of previous mental disorders among those hallucinogenic drug abusers who were being admitted to the hospital. In terms of trends among groups, both categories tended to be unsure as to the existence of these disorders, with the middle and smallest groups being characterized by the expression of agreement, as well as agreement, respectively, to the existence of such disorders. Thus, preliminary conclusions would seem to indicate that the evidence failed to support the contention put forth in hypothesis A, suggesting a direct relationship between the amount of experience a physician has in the area of treatment of hallucinogenic drug overdoses and the application of a specific diagnosis in these cases.
As a further indicator of this hypothesis, physicians were also asked to respond in terms of agreement as to the possibility that the action of these hallucinogenic drugs would allow underlying mental conflicts to be expressed in terms of psychotic behavior. As in the previous perspective, it was again hypothesized that physicians who had treated abusers would view these people in non-deviate terms by responding negatively. Conversely, those who had not treated would tend to view these people as exhibiting what they would term psychotic behavior based on the action of the drug.

As shown in TABLE 5, physicians who have treated hallucinogenic drug abusers tended to be in high agreement that the action of these drugs could allow underlying mental conflicts to be expressed in terms of psychotic behavior. More specifically, a majority of these physicians felt that this was the case. In contrast with TABLE 4, only 21.1 percent were unsure as to this statement, thus indicating a higher level of opinion than was previously recorded. Finally, as opposed to the hypothesized increase, in the last category the actual responses contained only 5.8 percent of the total.

Generally speaking, those physicians who have not treated hallucinogenic drug abusers tended to follow, again, the pattern established by those who have treated abusers. Accordingly, the highest number of responses was
TABLE 5.--Comparison of physicians' treatment experience and agreement of expression of psychotic behavior among abusers as result of drug

<table>
<thead>
<tr>
<th>Physicians' Treatment</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>Physicians who have treated drug abusers (N=54)</td>
<td>38</td>
</tr>
<tr>
<td>Physicians who have not treated drug abusers (N=52)</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>75.5</td>
</tr>
</tbody>
</table>

aInappropriate answers accounted for 2 of the respondents in this group.

bInappropriate answers accounted for 2 of the respondents in this group.

recorded in the high agreement of TABLE 5, followed by 20 percent who tended to be "Unsure" as to this expressive form of behavior as being released by the drug's actions. Finally, the smallest percentage was again recorded in the low agreement classification.

Discussion of these findings should be made on the basis of the group as a whole. According to the totals, 75.5 percent of all the physicians responding were in agreement as to the psychotic ("deviate") behavior criteria, versus 20.6 percent as being unsure and 3.9 percent
as being in low agreement, respectively. Additionally, percentage differences between the two groups were small, the largest being only 5 percent. Thus, the findings failed to support the hypothesis indicating a direct relationship between the amount of experience a physician has in the area of treatment of hallucinogenic drug overdoses and the application of a specific diagnosis.

Findings Concerning the Relationship Between Physicians' Experience in Treatment and Choice of Post-Emergency Mode of Treatment

The focus will be on two levels, that of the choice of an actual mode of treatment as well as a brief discussion of the actual basis on which this mode of treatment was based.

This section concerns itself with the second hypothesis, indicating that a direct relationship will exist between the amount of experience a physician has in the area of treatment of hallucinogenic drug overdoses and the choice of treatment of these overdoses.

Discussion of these areas will be based on the division of the group as a whole into two categories, these being actual experience as opposed to little or no experience. Thus, the choice of treatment will first be expressed from the perspective of the physicians who have treated hallucinogenic drug overdoses, followed by those who have little or no experience.
As shown in TABLE 6, physicians who have treated abusers indicated a strong preference for referral to the psychiatric section following emergency room treatment. This group accounted for 89.6 percent of the respondents in this category. Very few of these physicians favored release after treatment (10.4 percent) and none felt that the preferred mode of treatment was no treatment at all (0 percent), or other forms of treatment (0 percent).

TABLE 6.—Comparison of physicians' treatment experience and mode of treatment of abusers

<table>
<thead>
<tr>
<th>Mode of Treatment</th>
<th>Physicians' Treatment</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release Referral</td>
<td>After Emer. Treatment</td>
<td>Total</td>
<td></td>
<td>Treatment Psych. Sec. No Treatment</td>
<td></td>
<td>Treatment Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Physicians who have treated drug abusers (N=54)</td>
<td>5</td>
<td>10.4</td>
<td>43</td>
<td>89.6</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Physicians who have not treated drug abusers (N=52)</td>
<td>0</td>
<td>0.0</td>
<td>9</td>
<td>90.0</td>
<td>1</td>
<td>10.0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8.7</td>
<td>89.6</td>
<td>1.7</td>
<td>0.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

*Inappropriate answers accounted for 6 of the respondents in this group.*

*Inappropriate answers accounted for 42 of the respondents in this group.*
Among the group of physicians who have not treated abusers, 90 percent preferred to refer these individuals to the psychiatric section, while 10 percent stated no treatment, no referral or other types of treatment. Although these percentages seem quite high, it must be remembered that they account for only 10 of the possible 52 respondents, thus leaving 81 percent of the remaining data unaccounted for.

Generally speaking, there seems to be no difference in terms of preference of treatment since both groups indicated a strong preference to refer these patients to the psychiatric section of the hospital following admission. Only 8.7 percent stated that they released their patients following treatment, while none specified no treatment, no referral or other optional types of treatment. This would seem to agree closely with the data presented in TABLE 2, since a majority of physicians did agree that these drugs could bring about the presentation of psychotic behavior.

TABLE 7 would seem to present agreement and consistency since 42.1 percent of those treating drug abusers indicated that a possible previous mental condition was the basis for post-emergency treatment, while 57.9 percent felt that simple anxiety states were the basis of diagnosis. However, it must be remembered that 89.6 percent of this group did use referral to Psychiatric Section as a
TABLE 7.--Comparison of physicians' treatment experience and basis of post-emergency treatment

<table>
<thead>
<tr>
<th>Physicians' Treatment</th>
<th>Simple Anxiety States</th>
<th>Previous Mental Disorders</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Physicians who have treated drug abusers (N=54)</td>
<td>22</td>
<td>57.9</td>
<td>16</td>
</tr>
<tr>
<td>Physicians who have not treated drug abusers (N=52)</td>
<td>4</td>
<td>40.0</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>54.2</td>
<td>45.8</td>
<td></td>
</tr>
</tbody>
</table>

a Inappropriate answers accounted for 16 of the respondents in this group.

b Inappropriate answers accounted for 42 of the respondents in this group.

method of treatment. Thus, one may conclude that these "simple anxiety states" are being interpreted as a psychological problem. Additionally, although many (38.5 percent) of this group felt that they were unsure as to the existence of prior mental problems among hallucinogenic drug abusers, (as shown in TABLE 1), they nonetheless agreed that the action of these drugs could bring about the expression of mental conflicts in the form of psychotic episodes. (See TABLE 2.) Thus, the possibility that the drug's use could
precipitate one of these episodes may have offered the rationalization for the use of Psychiatric Services as a form of preventive medicine, thus controlling the problem before it can develop.

Faced with 81 percent of the responses among those who have not treated drug abusers as being inappropriate, any conclusions that can be drawn from the data presented in this section are of very doubtful value. However, of those responding (N=10), 40 percent felt that post-emergency treatment was based on simple anxiety states, while 60 percent felt that it was previous mental disorders providing an appropriate diagnosis.

In summation, of the total physicians responding, 89.6 percent indicated that they would refer drug abusers to the psychiatric section for treatment. Response differences between the groups of physicians who had experience in treatment and those who had not amounted to only .4 percent. At the same time, few of either group would allow the release of drug abusers as an optional choice of treatment. Thus, one may state that general hypothesis B, indicating that there will be a direct relationship between the experience a physician has in the treatment of hallucinogenic drug overdoses and the choice of a mode of treatment, failed to be upheld.
Findings Concerning the Relationship Between Physicians' Experience in Treatment and Their Attitudes Toward Specific Drugs

The focus will be a brief discussion of the attitudes of physicians toward specific categories of hallucinogenic drugs with the hypothesis stating that there will be a direct relationship between a physician's experience in treatment and his attitude toward the non-medical, non-prescription use of these drugs. That is, if the physician has treated the abuser as a non-deviate (no previous mental problems, disagreement as to the expression of psychotic behavior, release or confinement to a general hospital ward), theoretically he would not regard the use of these drugs under the above conditions as being harmful.

As can be seen from TABLE 8, physicians who have treated abusers felt that marihuana was harmful (51.8 percent). However, they also indicated the highest "non-harmful" percentages for all drugs presented for consideration. Thus, these physicians would seem to indicate that they viewed this drug as a minor hallucinogen, rather than a major one. At the same time, it was noted that 20.4 percent felt that they "didn't know" about the non-medical use as being harmful. This may reflect the small amount of publicity being given to the effects of marihuana versus those of LSD.
TABLE 8.--Perceptions of specific drugs by physicians who have treated drug abusers (N=54)

<table>
<thead>
<tr>
<th>Specific Drugs, Groups</th>
<th>Attitudes Toward Drugs</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Harmful</td>
<td>Not Harmful</td>
<td>Don't Know</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>No Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marihuana</td>
<td>28</td>
<td>51.8</td>
<td>15</td>
<td>27.8</td>
<td>11</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STP</td>
<td>41</td>
<td>75.9</td>
<td>1</td>
<td>1.9</td>
<td>12</td>
</tr>
<tr>
<td>Mescaline</td>
<td>48</td>
<td>88.9</td>
<td>2</td>
<td>3.7</td>
<td>4</td>
</tr>
<tr>
<td>Group 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMT</td>
<td>39</td>
<td>72.2</td>
<td>-0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Psilocybin</td>
<td>38</td>
<td>70.4</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSD</td>
<td>48</td>
<td>88.8</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>No Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Bronze&quot;</td>
<td>20</td>
<td>37.1</td>
<td>1</td>
<td>1.9</td>
<td>33</td>
</tr>
</tbody>
</table>

Physicians who have treated abusers also agreed that both drugs found in Group 1--STP and mescaline--were harmful, the percentages being 75.9 percent (STP) and 88.9 percent (mescaline), respectively. Only 1.9 percent (STP) and 3.7 percent (mescaline) felt that these drugs were not harmful. Finally, 22.2 percent (STP) and 7.4 percent (mescaline) didn't know. In terms of Group 2, DMT and psilocybin, similar results were noticed. For example, 72.2 percent felt that DMT was harmful, while 70.4 percent felt that psilocybin was, also. At the same time, none
felt that neither of these drugs was not harmful. Finally, 27.8 percent (DMT) and 29.6 percent (psilocybin) stated that they didn't know. For the final group, LSD, 88.8 percent felt that LSD was harmful, while none felt that it was not. Insofar as this drug is concerned, there seems to be a larger number of physicians who would take a "Harmful" or "Not Harmful" stance, since very few responded that they did not know if the drug was harmful or not (11.1 percent). This may be partially explained by the large amount of publicity that has been given this drug in the past few years. At the same time, physicians indicate that this drug is responsible for most of the drug abuse cases admitted into the hospital, thus they may have more factual and practical experience with this drug than any of the others. In terms of the dummy drug, "bronze," there is some indication that physicians may determine that a drug is harmful simply by being listed with other, more well-known hallucinogens. Thus 37 percent of these physicians stated that they felt that this drug was harmful when used under non-medical conditions. Only 1.9 percent felt that it was not harmful, and 61.1 percent stated that they didn't know.

As can be seen in TABLE 9, physicians who have not treated drug abusers differ only slightly in their attitudes toward these drugs. In terms of marihuana, the same tendency toward an increased number of physicians (15.4 per-
TABLE 9.—Perceptions of specific drugs by physicians who have not treated drug abusers (N=52)

<table>
<thead>
<tr>
<th>Specific Drugs, Groups</th>
<th>Attitudes Toward Drugs</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Harmful</td>
<td>Not Harmful</td>
<td>Don't Know</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>No Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marihuana</td>
<td>38</td>
<td>73.1</td>
<td>8</td>
<td>15.4</td>
<td>6</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STP</td>
<td>28</td>
<td>53.8</td>
<td>0</td>
<td>0.</td>
<td>24</td>
</tr>
<tr>
<td>Mescaline</td>
<td>45</td>
<td>86.5</td>
<td>0</td>
<td>0.</td>
<td>7</td>
</tr>
<tr>
<td>Group 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMT</td>
<td>24</td>
<td>46.2</td>
<td>0</td>
<td>0.</td>
<td>28</td>
</tr>
<tr>
<td>Psilocybin</td>
<td>27</td>
<td>51.9</td>
<td>0</td>
<td>0.</td>
<td>25</td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSD</td>
<td>52</td>
<td>100.</td>
<td>0</td>
<td>0.</td>
<td>0</td>
</tr>
<tr>
<td>No Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Bronze&quot;</td>
<td>13</td>
<td>25.</td>
<td>0</td>
<td>0.</td>
<td>39</td>
</tr>
</tbody>
</table>

percent) regarding it as not harmful appears to be the case. This is followed by 73.1 percent who regard it as harmful and 11.5 percent who felt that they didn't know enough about the drug to state their feelings about it. In terms of the more powerful hallucinogens, beginning with Group 1, only 53.8 percent felt that STP was harmful, while 46.2 percent didn't know. (Interestingly, not a single entry was made for any of the "group" drugs in the "Not Harmful" category. These physicians either felt that the drug was harmful in terms of non-medical usage...
or else they stated that they did not know about the drug.) Concerning the drugs in Group 2, DMT and psilocybin, this seems to be closely divided between those who feel that the drug is harmful and those who don't know about the drug. The percentages are that 46.2 percent (DMT) and 51.9 percent (psilocybin) considered it harmful while 53.8 percent (DMT) and 48.1 percent (psilocybin), respectively, didn't know about the drug. These physicians were in complete agreement (100 percent) that the single drug in Group 3 was harmful. None stated that they were not aware of the drug, although very few seem to have experience with it. Finally, these physicians seem to display the same tendency to determine guilt by association as those who have treated abusers. Thus, for the dummy drug, "bronze," although a majority (75 percent) did not know about it, 25 percent did feel that its use was harmful.

Considering the possibility of a direct relationship between a physician's experience and his attitude toward drugs of this type, one must conclude that the existing evidence does not point to such a relationship. Very few of those who had treated abusers felt that the use of these drugs was not harmful. Most felt that its use was harmful and, with the exception of the dummy drug, the percentages varied between 70.4 and 88.9 percent.

From the perspective of those who had not treated
abusers, none felt that they were not harmful. Thus, they seem to be divided in two groups, those who know and feel that the drug is harmful and those who do not know. The one exception is the drug LSD, in which all the physicians agreed that its use was harmful.

Generally speaking, then, one may consider the possibility that most of these physicians from both groups consider the non-medical use of these drugs to be harmful, while few would feel that this usage is not harmful. The evidence seems to bear out this contention.
CHAPTER IV

SUMMARY AND CONCLUSIONS

Summary

The major purpose of this study was to explore the relationship of physicians' experience with hallucinogenic drug abusers as indicators of prescribed modes of treatment.

The attitudes of these physicians were determined by: (1) physician's level of agreement or disagreement in terms of the patient's mental state prior to admission; (2) physician's level of agreement or disagreement in terms of the actions of these hallucinogenic drugs as releasing underlying mental disorders in terms of the expression of psychotic behavior; (3) physician's attitudes toward several classes of hallucinogenic drugs being used under non-medical conditions; (4) physician's choice of several optional modes of treatment given that the individual is recognized as a hallucinogenic drug abuser; and (5) the basis of post-emergency treatment as exemplified by the choice between two options--(a) the physical effects of the drug expressed in terms of simple anxiety states, or (b) the mental effects expressed in terms of the possibility of previously existing mental conditions.
Data for the study were collected through a questionnaire distributed through the hospital mail room. An accompanying cover letter, written by a well-known hospital physician explained the purpose of the questionnaire, and collection was made through boxes placed near the mail slots.

The possibility exists that the returned questionnaires do not constitute a representative sample of the staff of the hospital, since those returned accounted for only 41 percent of those distributed. Thus, the possibility of differential attitudes and opinions exists, since the 59 percent not responding may have responded differently than the respondents toward hallucinogenic drug abusers.

One of the findings of this study was the respondents' responses to questions concerning the psychological aspects of the individual abuser as well as the drugs as being the expression of psychotic behavior. Of all the physicians responding, 38.5 percent were unsure as to the existence of prior mental disorders among hallucinogenic drug abusers, 35.9 percent tended to be in low agreement, and 25.6 percent highly agreed. At the same time, 75.5 percent of all physicians felt strongly that these overdoses could be the expression of underlying mental conflicts in terms of psychotic behavior. This was followed by 20.6 percent who tended to be unsure and 3.9 per-
cent who tended to disagree with this statement. Thus, although these physicians would disagree as to the existence of prior mental problems, they did agree that these drugs could allow drug users to express psychotic behavior.

This emphasis on the psychological aspects carried over into the areas of treatment as well. Most of the physicians (89.6 percent) felt that treatment should be referral to Psychiatric Services in preference to release after treatment (10.4 percent).

Physicians also tended to regard the groups of drugs as harmful when used under non-medical supervision. These ranged from complete agreement, as in the case of LSD (100 percent), to a low of 59.4 percent. Indications of a tendency among physicians to apply guilt by association was also noticed, as in the case of "bronze." Several respondents (31.1 percent) felt that it was harmful when, in reality, there was no such drug available for usage.

Although tests of statistical significance were not performed on the data, the findings did not appear in the predicted direction, and consequently failed to support the theory that there is a direct relationship between a physician's treatment experience in terms of hallucinogenic drug abusers and the views toward these people, the drugs they use, and the choice of an optional mode of
The findings that failed to support this theory are:

1. Physicians' treatment experience tended to make little difference in their attitudes toward hallucinogenic drug abusers, in terms of their views as to the existence of previous mental disorders.

2. Physicians' treatment experience tended to make little difference in their attitudes toward hallucinogenic drug abusers, since both groups (have treated, as well as have not treated) strongly agreed that the drugs could bring about the expression of psychotic behavior due to underlying mental conflicts.

3. Physicians' treatment experience tended to make little difference as to the choice of treatment, since both groups tended to agree that referral to the psychiatric section was the preferred mode of treatment rather than release after treatment.

4. Physicians, regardless of their treatment experience, tended to regard the non-medical usage of these groups of drugs as "harmful" rather than "non-harmful." Although a decrease in the "harmful" groups brought about a corresponding increase in the "don't know" group, it is interesting to note that very few of these physicians felt that this usage was not harmful.

The findings failed to support the theory that physicians who had treated abusers would regard them in non-deviate terms, while those who had not treated them would regard them in deviate (psychotic) terms. As seen from the previous sections, 75.5 percent of all physicians regarded them as deviates and reacted accordingly.

The theory concerning physicians' attitudes as exem-
plified by an optional choice of treatment was also unsupported, since 89.6 percent felt that psychological treatment was the preferred choice over release.

Finally, the theory that physicians who have treated hallucinogenic drug abusers would tend to view the use of these drugs under non-medical conditions as "Not Harmful" was not supported, since a majority of all physicians tended to agree that usage under these conditions was harmful.

Conclusions

The respondents' negative responses to questions concerning hallucinogenic drug abusers was greater than expected. Conversely, greater differences in the views of these physicians toward hallucinogenic drug abusers was also expected.

The large number of negative responses and the small amount of difference among physicians who have treated as well as those who have not may be due to one of two conditions. Firstly, Becker's contentions regarding the attitudes of physicians expressed in their treatment may be acceptable and therefore the data may be assumed to reinforce these assumptions. Secondly, the lack of difference may be accounted for in the type of measurement instrument used in gathering the data.

Although allowing for the collection of a large
amount of data, the questionnaire had many limitations, the first being a lack of refinement to measure adequately the more subtle, yet important differences in the attitudes of this particular group. Other limitations may include: (1) anonymity; (2) voluntary participation; and (3) limited response categories.

The anonymity of the questionnaire may affect the answers, since physicians may be able to express attitudes and treatment of hallucinogenic drug abusers more readily on a questionnaire than they would be able to do on a personal interactional basis with patients.

The element of voluntary participation undoubtedly affected the responses. Even with the assistance of a cover letter from a well-known physician on the hospital staff, only 41 percent returned it to the collection point. Since obviously a mandatory questionnaire would not be possible, nor well received, the possibility of a cover letter indicating administrative approval may have been helpful.

Finally, limited response categories in some of the questions may have altered the results, since many physicians may have felt attitudes which were not among those offered as choices. Thus, the respondent may have simply left the space blank.

The obvious solution to this situation would be the application of interview techniques in combination with
a series of carefully-worded questions. Since it has been shown that questions in which the respondent is asked to choose an answer from those presented may have altered the results of the above study, these would be presented along the lines of an open-ended series of questions allowing the respondent to express his opinion more clearly. Once this had been established, the possibility of using probe questions to determine these opinions from other perspectives would be explored.

The application of this form of questioning would also be applicable to the viewpoints of the abusers themselves, not only to determine the differences in treatment of a hallucinogenic drug overdose, but possible changes in attitudes toward other abusers as well. Becker maintains that this investigation of different methods of treatment is important to any serious study concerned with the social interpretation of these drugs' effects.

The possibility also exists that this type of study might also be expanded to include other forms of drugs such as heroin or cocaine, as well as the amphetamine and barbiturate groups, to determine if possible differences exist in a physician's attitudes toward individuals who use these drugs.

Finally, since relatively few of the drug-abuse cases in the study hospital were of the hallucinogenic variety, the possibility exists that another sample of
physicians in a hospital which has a higher incidence of these reactions may yield different results.
BIBLIOGRAPHY


American Medical Association Committee on Alcoholism and Drug Dependence, "Dependence on Cannabis (Marihuana)," Journal of the American Medical Association, CCI (August 7, 1967), 368-71.

American Medical Association Committee on Alcoholism and Drug Dependence, "Dependence on LSD and Other Hallucinogenic Drugs." Journal of the American Medical Association, CClII (October 2, 1967), 48-50.


Weil, Andrew, "Clinical and Psychological Effects of Marihuana in Man." Science, CLXII (December 1968), 1234-42.


## INCIDENCE OF ADVERSE REACTION TO DRUGS
### 1965 THROUGH 1970

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Opiates and synthetic analogs</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Other analgesics and antipyretics</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>47</td>
<td>48</td>
<td>42</td>
<td>51</td>
<td>27</td>
<td>37</td>
<td>252</td>
</tr>
<tr>
<td>Chloral hydrate</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Bromides</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Cannabis sativa</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Hallucinogenics</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Other sedatives and hypnotics</td>
<td>20</td>
<td>13</td>
<td>18</td>
<td>33</td>
<td>32</td>
<td>38</td>
<td>154</td>
</tr>
<tr>
<td>Central nervous system stimulants</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>38</td>
<td>45</td>
<td>31</td>
<td>44</td>
<td>36</td>
<td>21</td>
<td>215</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Barbiturates with salicylates or other non-addicting analgesics</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Barbiturates with tranquilizers and antidepressants</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Non-barbiturate sedatives with tranquilizers or antidepressants</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
### ADVERSE REACTION—Continued

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tranquilizers with antidepressants</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Alcohol and barbiturates</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Alcohol and non-barbiturate sedatives</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Alcohol and antihistamines</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Alcohol and tranquilizers</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Alcohol and antidepressants</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Alcohol and central nervous system depressants or muscle relaxants</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Alcohol and hallucinogens</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Record Room, William Beaumont Hospital, Royal Oak, Michigan
APPENDIX B
Gentlemen:

This is a questionnaire composed by Jon Latimer, son of our own Dr. Fred Latimer. Jon is a graduate student in Sociology at Western Michigan University and is very interested in the problem of drug abuse. I have encouraged him to submit this questionnaire to members of this staff, so that he could have some idea of the exposure and awareness to this problem on our part. As most of you probably know, I have been interested in, and concerned with the problem of drug abuse in our community and was pleased to talk with Jon a short while ago and find him exceedingly knowledgeable. It's thru efforts like this that we can begin to make a dent in one of our country's major social issues, and for our own part identify more accurately how we fit into it. I reviewed the questionnaire, found it brief and to the point, and I would encourage you to participate. If you don't recognize some of the words or drugs simply say so because this is of use to know also.

Norton J. Cooksey, M.D.
Dear Doctor:

Recently there has been much emphasis on the problem of hallucinogenic drug abuse among young people. Although large numbers of these individuals use hallucinogenic drugs with no apparent after-effects, there is a small percentage of these users who do experience harmful effects during the drug's influence. Little research has been done in this area especially in the treatment of individuals experiencing these effects at the time of admission.

The following questionnaire concerns itself with this area. Realizing that you do not have the time to fill out lengthy forms, the questions contained therein are short answer and can be filled out in a few seconds.

Your taking time to fill it out will be greatly appreciated. The answers are, of course, confidential and will be seen only by those involved directly with this project. Consequently, there is no need to sign it.

Thank you,

Frederick J. Latimer
QUESTIONNAIRE

Instructions: Please fill out the following questions by placing a check (✓) or an "X" in the appropriate space. In those spaces where you are asked to specify another answer, please do so in as much detail as possible. Your cooperation in filling out this questionnaire is appreciated.

1. Have you ever treated drug users admitted to the Emergency Unit of your hospital?
   _____ Yes _____ No

2. Was your first diagnosis in those cases in which you became involved recognizable as some form of drug abuse?
   _____ Yes _____ No

3. If "No," why not?

4. If "Yes," specify the symptoms that led to this diagnosis.

5. Was this preliminary diagnosis correct?

6. In those cases where hallucinatory drug abuse was known, treatment included which of the following?
   _____ Release after emergency treatment for drug's effects, no referral to psychiatric services in hospital for consultation.
   _____ Referral to psychiatric services following emergency treatment.
   _____ No treatment, no referral.
   _____ Other treatment—please specify.
7. Would you agree that most drug users coming into this hospital have a past history of mental disorders at the time of admission?

   ______ Strongly agree
   ______ Agree
   ______ Unsure
   ______ Disagree
   ______ Strongly disagree

8. Post-emergency treatment was on the basis of which of the following?

   ______ Simple anxiety states induced by the drug's actions.
   ______ Mental disorders existing prior to usage.

9. Please specify your medical specialty.

10. How often are you on call in the emergency unit of your hospital?

   ______ Never
   ______ Once a month
   ______ Every two weeks
   ______ Once a week
   ______ More often than once a week (please specify)

11. What are your personal views on the non-medical use of the following drugs?

    Harmful  Not Harmful  Don't Know

    Marijuana
    DMT
    STP
    Mescaline
    Psilocybin
    Nutmeg
    Acetone
    LSD
    "Bronze"
    Airplane glue
12. In your opinion, which of the above accounts for most emergency drug abuse admittances?

13. Would you agree that the action of these hallucinogenic drugs allows underlying mental conflicts to be expressed in psychotic behavior?

______ Strongly agree
______ Agree
______ Unsure
______ Disagree
______ Strongly disagree

14. In your opinion, what would be the underlying cause of someone using drugs of this type for non-medical purposes?

______ Societal pressures
______ Family problems
______ To escape reality (unhappy with life)
______ Peer group pressure (everybody's doing it)
______ Personality disturbances
______ To achieve greater "self-awareness"
______ Other (please specify)

15. Have these opinions been confirmed?

______ Yes   ______ No

16. How have these opinions been confirmed? (Please specify.)