A Study Indicating a Connection Between Paranoia, Schizophrenia, Perceptual Disorders, and I.Q. in Alcohol and Drug Abusers

Alfred F. Libby, Ph.D.[1]; John L. Day, Ph.D.3; Charles R. Starling, M.D.2; David K. MacMurray Ph.D.[1]; Fleming H. Josefson, M.A.2

Background of the Study

The original report on the use of sodium ascorbate, vitamins, minerals, and amino acids was first published in the **Journal of Orthomolecular Psychiatry,** Volume 6, Number 4: The Hypoascorbemia-Kwa-shiorkor Approach to Drug Addiction Therapy, A Pilot Study, co-authored by Libby and Stone. From the time of the above publication on-going use of this unique method brought about refinements in the technique. Although the results and new refinements continued to be astounding, many new questions and perhaps answers had surfaced. The opportunity arose to do a closely controlled study to test and quantify these new hypotheses.

A hospital setting was located in Southern California that appeared to offer an ideal opportunity to test our hypotheses. Individuals are sent to this hospital facility for post-detoxification rehabilitation by Court dictates as an alternative to jail or prison. In speaking to the patients prior to the initiation of our testing, they all exhibited the typical addiction personality as evidenced by their lethargy, antagonism, skepticism, dull personality with no energy and a reluctance to volunteer for anything the establishment asked them to do. The potential patients were interviewed on three separate occasions in order to encourage them to volunteer for this study. One objective was to convince the potential patients that they were still chemically contaminated with drugs even though they could test "clean" by traditional methods. Another objective was to convince them we would not harm them in any way and no drugs would be used. A medical release form was signed by each volunteer. The patient population was a mixture of males and females ranging in age from 18 to 45 years of age. The patients were Caucasians, Blacks, Mexicans and one South-American. The types of drug abuse ranged from alcohol, heroin, cocaine, PCP, marijuana, methadone, to multiple pill abuse. The patients had been in this post-detoxification

'Libby Institute for Orthomolecular Medicine and Research. 626 E. Commonwealth Ave.. Fullerton. California 92631 'Orthomolecular Inc. 201 South Lake Ave., Suite 500 Pasadena, California 91101 [3]Professor of Psychology, Newport University 3720 Campus Drive, Newport Beach, California 92660

setting from one day to six months prior to our arrival.

A physical examination had been given to each patient by a hospital physician as a prerequisite for admission into the facility. Patients once admitted were compelled to follow a designated counseling program unique to the institution itself. This involved daily one-on-one confrontive counseling, confrontive group-sessions regularly spaced and work assignments for each patient participant. Patients followed a rigid in-house code of behavior which precluded any and all contact with drugs or other intoxicants. A minimum of three written reports, three or more pages each, was to be submitted by the patient to the counselors per week based on topics selected by the counselors. Patients were required to inform on any of their coparticipants who might be suspected of drug or alcohol involvement. Consequently the facility experienced a rapid turnover of the patient population. For example, when the facility obtained its Federal-State-County funding in October, 1979, it reopened its doors to admit 9 probation referred patients. None of these patients were discharged. In November, 1979, 16 patients were admitted; 7 patients were discharged or voluntarily left the facility. In December,
1979, 20 patients were admitted; 17 patients were discharged or voluntarily left the facility. In January, 1980, 25 patients were admitted; 25 patients were discharged or voluntarily left the facility. In February,
1980, 18 patients were admitted; 6 were discharged or voluntarily left the facility. In March, 1980, 16 patients were admitted; 22 were discharged or voluntarily left the facility. In April, 1980, 15 patients were admitted; 18 patients were discharged or voluntarily left the facility. In May, 1980, 21 patients were admitted; 18 patients were discharged or voluntarily left the facility. It is interesting to note that during our entire stay at the facility from May 25, 1980 to July 3, 1980 no patient voluntarily dropped out of our program. The varied composition of the groups prevented the establishment of unalterable homogeneous standards for final evaluation. The institutional setting was characterized by random admissions and dismissals of participants as well as the expulsion of any individual who was found to have violated the rule of "no drug or alcohol intake/involvement while in the program."

The patient diet had consisted of 70 percent "junk food" budgeted at $3.27 per patient, per day. There was no organized exercise program and an absolute minimum of athletic equipment was available when we arrived on the scene. With this type of background information, facility and setting, we proceeded with the study.

Procedure and Methodology

As a prerequisite for initiation of treatment on day one, each volunteer was required to give a 24-hour urine specimen so that a quantitative 24-hour urine amino acid assay, 24-hour Cortisol level and a 24-hour level of vitamin C could be obtained. A laboratory technologist drew blood samples to include a CBC, VDRL SMA-26, 12 and urinalysis. After breakfast a hair analysis was obtained from each patient and 35mm photographs were taken. The patients were then given the following psychological tests: (a) Hoffer-Osmond Diagnostic Test, (b) Bender-Gestalt, (c) POD, and (d) the Pea-body Picture Vocabulary Test.

On day two the patients were given Dietary Evaluations, a Health Hazard Appraisal, and Computerized Medical History forms to complete. Individual cassette recordings were made on each patient to establish voice levels, type of drug usage, the age each individual began to use drugs, and the drug they first used.

Upon completion of the required testing, initiation of treatment began. An additional working hypothesis was that despite traditional concepts to the contrary, there is an ongoing chemical contamination irrespective of the length of time the patient had been termed "clean" from drugs. Due to this lingering chemical contamination, the patient population selected was lethargic, listless, exhibited poor personality and had no real desire to cooperate and yet still had a "guts-craving" for drugs once they left this mandatory facility. Therefore, a decontamination process began, using sodium ascorbate and calcium with magnesium. We

utilize judgments or tasks—the utilization of unique and individual ways of problem-solving; mission, which is a sense of dedication to a life task, a belief in the importance of developing one's highest potentialities; and the manipulation of awareness defined as the capacity to recognize common manipulative, or controlling patterns in others and also to admit that oneself, as well as others, has a tendency to manipulate from time to time.

The fourth psychological test chosen, the **Hotter-Osmond Diagnostic Test** (hereinafter referred to as the "HOD" Test) is a questionnaire which consists of 145 questions which are answered "True or False" by the testee. The test is designed to examine the elements of visual, auditory, tactile, gustatory, olfactory, and time perceptions as well as probing into the thought processes and affect or mood of the individual. Although the test is available in either card or booklet form, we used the booklet form which provided readily scorable profile sheets for rapid view-comparisons.

There is provided for the examiner a standard score sheet and scoring keys which are used to provide the following six scales or scores: (1) Total Score (TS); (2) Perceptual Score (PerS); (3) Depression Score (DS); (4) Paranoid Score (PS); (5) Ratio Score (RS); and (6) Short Form (SF) score.

Hoffer and Osmond make the point that a first step in diagnosis is to recognize that illness runs a particular course in time, that an illness has a natural history, and that the patterns or complaints or symptoms are called syndromes. They contend that diagnosis is the cornerstone of medicine, and also they emphasize the elements of instant recognition of the more compelling indices of pathology. Since their assumption is that psychological testing, per se, is not as reliable as, say, questionnaires and/or physician interview, they have put together the HOD test as an answer to the needs of the busy physician who may not care to indulge himself in unproductive considerations. After an amazing amount of verification of their clinical findings, they have published the following scales for cclinical assessment:

TS, the total score provides an overall assessment score for the patient's condition, with special reference to schizophrenia out each scale. In this scale, the majority of patients over the age of 18 diagnosed as schizophrenics obtain scores over 30, whereas the majority of non -schizophrenic psychotics (excluding toxic and organic cases) neurotics, character-disordered persons, and normal subjects score 30 or less. In a HOD study (one thousand young drug users), it was found that those with a TS of 70 or more reported feelings of being outside or alienated from the social order. The score of 70 was regarded as the "break-off point". As one can easily see, the facet of social alienation and individual drug use was of enormous importance to our final evaluation of each subject.

The PerS, perceptual score, is derived from 53 statements (questions) in the test. For subjects 18 years old and older, a score of four or more was usual for schizophrenics, and less than four usual for non-schizophrenics. This section of the test probes the five senses; namely the visual, auditory, tactile, taste and time perceptions. The PS, paranoid score, consists of 15 items designed to ferret out the degree of suspicion felt by the subject-patient. A high score, of course, would indicate difficulty in interpersonal relationships. The cutoff scores, then, are one or two for patients 18 years of age or over, and four points for subjects 13 to 17 years of age.

The DS. depression score, is made up of 18 points. The patient's affect life or state is especially important to the clinician. Their established cutoff scores are three for ages 18 or over; and seven for 13 to 17. One significant aspect of this score is that it aids in estimating the risk of suicide.

The RS, ratio score is calculated by dividing the TS score by the DS score; and when DS is zero TS is multiplied by two. For example, an RS of 7.0 can be obtained by a schizophrenic patient who has a TS of 49 and a DS of 7. This Ratio Score was found to make a sharper discrimination between schizophrenia and non-schizophrenic psychiatric patients. The cutoff score for ages 18 and over is 4.9.

The SF, short form, provides a rapid index of degree of schizophrenia when compared with Total Score. The score is derived from an item analysis of the 145 items in the questionnaire. A total of 17 items which made the sharpest diagnostic discrimination became the SF scale. This test is useful as a short emergency scale when time does not permit the administration and scoring of the whole test. This test is particularly valuable to the clinician when monitoring a patient's response to treatment on a daily basis. The cutoff for this section is two to three in subjects 18 years or over.

Discussion of Test Result Limitations

Before proceeding, a word of apology and explanation is due here. It is simply not in the scope of this paper to discuss our other significant findings accomplished in this study. We simply state we did Pre-test, Post-test in the following areas: Vitamin C levels, SMA-26, 24-hour urine Cortisol levels, CBC's with particular emphasis on the Lymphocyte, Urinalysis, 24-hour quantitative urine amino acid assays, Cyanocobala-min blood levels, Electrolytes with emphasis on Sodium, voice cassette recordings and 35mm photographs. One other apology; it is still not within the scope of this paper to discuss the amounts, varieties and time frequency of the vitamins, minerals and amino acids used to achieve the goals accomplished.

Discussion off the Test Groups

Of the total number who participated (29), there were 26 males and 3 females. Their ages ranged from the early 20's to the early 40's. Their academic backgrounds were as mixed as the population, anywhere from dropouts in the sixth grade to one college graduate with a degree in chemistry.

One interesting fact is that 98 percent of the patient drug population began their drug usage at 13 years of age and their first drug of abuse was marijuana!

Peabody Picture Vocabulary Test

The Peabody IQ Test was administered on the same day as the other three psychological tests in order to examine the possibilities in certain hypotheses that we had regarding an individual's intelligence. One salutary feature of our composite group of 29 was that the median IQ for all participants was exactly 100! First testing sessions began on May 25, 1980. The IQ's obtained ranged from the low 80's to the low 130's. On the second testing date, June 3, 1980, nine days later, for all individuals in the groups, there was an average increase in the IQ score of 4.8 points. There were some remarkable changes in several individual scores (both up and down!). A review of the Graph will show that patients Numbers 5, 10, 13, and 17 made startlingly different scores on the second administration of the IQ tests. Subject Number 5, for example, increased his score from IQ 89 to IQ 123! This occurred after a span of only eight days!

GRAPH I

Peabody Picture Vocabulary Test

Patients	**IQ Results May 25, 1980**	**IQ Results June 3, 1980**
Number 4	122	126
Number 6	107	108
Number 7	96	96
Number 9	102	100
Number 11	84	84
Number 12	91	91
Number 16	88	86
Number 22	114	112
Number 23	80	84

Patients	**IQ Results**	**20 Patients**
Number 1	88	94
Number 2	87	87
Number 3	83	84
Number 5	89	123
Number 8	94	101
Number 10	90	108
Number 13	131	133
Number 14	98	113
Number 15	94	98
Number 17	118	125
Number 18	96	102
Number 19	97	93
Number 20	111	131
Number 21	116	120
Number 24	87	92
Number 25	129	126
Number 26	121	117
Number 27	101	112
Number 28	114	93
Number 39	96	87

Results off the Study: Discussion

The relationships derived in the full battery of testing are all the more astonishing and flattering to our program when they are put up to scrutiny. The Hoffer-Osmond Test scores were very effective devices for identifying the actively involved schizophrenic in the same way that the Bender-Gestalt was effective in isolating those individuals who had high indices of visuo-motor-perceptual faults traceable *to* their admissions diagnosis —in our cases, alcohol and drug addiction.

Once the initial testing had been accomplished and base scores recorded for later comparisons to planned testing, certain suppositions of psychological test results were to be sorely tested. For example, the Testing Director was convinced that dramatic changes were not to be expected in so short a time as nine days (when testing period would occur). The Testing Director was heard to say in a private conversation on the eighth day and eve of second testing: "I hope Dr. Libby will not be too disappointed tomorrow with the test scores which I am convinced will not change all that much."

The Testing Director had in no uncertain terms stated that it was not clinically feasible to expect any dramatic changes in this regard. He was to be proved wrong. Hoffer and Osmond state on page 43 of their text that, "Some (patients) have become discouraged with their progress even though they were improving by 10 TS points per month. However, if a patient, for example, has an initial score of 140, which is not unusual, steady improvement at this gratifying rate would still require almost one year before approaching the outer limits of normality in an adult. In such cases the therapist's support and determined, even relentless, encouragement may be a major factor in helping the patient to continue faithfully with treatment."

The Bender-Gestalt scores, from pre-test to post-test showed an average decrease of 21.65 points, with a range of decrement from 103 to 28.5 points. By all the rules this kind of change borders on the miraculous. Some of the most impressive drops were shown by Subject Number 10 who went from 103 down to 51.5; Subject Number 7 who went from 99 down to 28.5; Subject Number 14 who dropped from 98.5 down to 41.50; Subject Number 21 who went from 91 down to 47; and Subject Number 3 who dropped from 86 to 42. For these five alone, the average decrease was an incredible 43.6 points—more than twice the total patient-group average!

More evidence of the efficacy of the treatment regimen was provided by the composite HOD scores. For reasons of clarity, we have selected Subjects Number 5 and Number 20 for immediate comparison to the Bender-Gestalt Scores. Subject Number 5 received a pre-test HOD score of 126 and a Bender of 76 and post-test had dropped down to 31 on the HOD and 42.50 on the Bender-Gestalt. Subject Number 20 who had a pre-test HOD score of 122 and a 98.5 on the Bender-Gestalt, on post-test dropped down to an astonishing 9 on the HOD and to 41.50 on the Bender-Gestalt! In addition, the IQ score earned by Subject Number 5 in pre-test (IQ 89) had risen to a remarkable score of 123 on another form (Form B) of the PPVT. Subject Number 20 had an increase recorded from 111 to 131! On a point like this. Osmond himself says in his text on page 32: "One wonders what may happen to their IQ and academic performance after these perceptual changes are treated successfully." Other representative IQ changes were shown by Subjects Number 10 (90 to 108); Number 14 (98 to 113); Number 21 (116 to 120); and Number 17 (118 to 125). Historically, these kinds of changes have not been routine— or expected—in one week's time!

The salutary features of the psychological testing were repeatedly evidenced by comparable physical, mental and emotional changes—not to mention the psychophysical changes accompanied by increased self-esteem and renewed zest in living. One of our patients, for example, was almost immediately able to start jogging daily; another, on dismissal, went back to his acting craft and was recently reported to be working in a Broadway play.

In terms of consequences, these events may not seem so remarkable because it is practical to think of any therapy as benefit

producing after a period of time. However, in terms of time, the brevity of our treatment is, indeed, remarkable. Initially our proposed period of time for detox was three to five days—taking into account matters of physical change, mental and emotional flooding, imposed diarrhea, and a host of ancillary symptomatology. However, we have refined the intake procedures and regimen of first-day treatment and are happy to report complete detoxification in our patients in as little time as ten hours!

In summary, the groups, consisting of twenty-nine individuals, showed significant changes in both the IQ scores and the psy-chopathology scores in pre-test and post-test settings. The group labeled "Schizophrenic" (or organically damaged) made the most dramatic improvement, averaging a decrease of 40 points in psychopathology; the group labeled "Neurotic" also did quite well, averaging a decrease of 29 points in psychopathology; and the group labeled "Normal" showed the least impressive change (nonetheless a positive one) of eight points in psychopathology during the treatment program.

GRAPH II

Bender-Gestalt—Test Results—9 Patients

Patient	**Patient**
Number 4 Neurotic-Normal 83.00 - 78.00	Number 12 Neurotic-Normal 62.50-40.25
Patient Number 6 Neurotic - Neurotic 76.00 - 68.00	Patient Number 16 Normal - Normal 56.75-53.00
Patient Number 7 Neurotic - Normal 68.00-44.00	Patient Number 22 Normal - Normal 60.00 - 49.50
Patient Number 9 Neurotic - Neurotic 87.00-80.00	Patient Number 23 Neurotic - Normal 76.75-44.00
Patient Number 11 Neurotic - Neurotic 77.00-63.00	Legend 26 - 60 Normal 61-89 Neurotics 90 -110 Schizophrenics 111 - 173 0rganics

GRAPH II A

Bender-Gestalt-Test Results-20 Patients

Patient Number 1 Normal - Normal 56.00-40.25-33.25	Patient Number 13 Normal - Normal 54.75-36.50-39.50
Patient Number 2 Neurotic - Normal 71.00-37.50-50.00	Patient Number 14 Organic - Normal 103.00-61.00-51.50
Patient Number 3 Normal - Normal 56.00-57.25-41.25	Patient Number 15 Neurotic - Normal 62.00-42.00-35.00
Patient Number 5 Neurotic - Normal 84.75-84.00-42.50	Patient Number 17 Normal - Normal 53.50 - 39.50 - 43.50
Patient Number 8 Normal - Normal 50.25-41.00-50.50	Patient Number 18 Normal - Normal 43.25 - 39.00 - 37.25
Patient Number 10 Schizophrenic - Normal 99.00-57.25-41.25	Patient Number 19 Neurotic - Normal 61.25-41.25-32.00

GRAPH II B

Bender-Gestalt-Test Results--20 Patients

Patient Number 20 Schizophrenic - Normal 98.50-75.25-41.50	Patient Number 26 Normal - Normal 52.50-66.00-52.25
Patient Number 21 Neurotic - Normal 63.50-40.00-39.50	Patient Number 27 Normal - Normal 43.25 - 32.25 - 33.50
Patient Number 24 Neurotic - Normal 73.00-62.00-34.25	Patient Number 28 Neurotic - Normal 71.50-63.25-48.25
Patient Number 25 Neurotic - Normal 62.50-47.50-41.00	Patient Number 29 Schizophrenic - Normal 91.00-92.00-47.50

Subject Breakdown: 4 Schizophrenic—high psychopathology or organic with brain damage 15 Neurotic—"low grade neurotic" 10 Normal—"within normal limits" Results Test I (29) Individuals - 67.8 average (low grade neurotic) Test II (29) Individuals - 44.5 average (high grade normal) Decrement - 21.65 average! A very striking profile in view of the varied makeup of the groups!

Personal Orientation Dimensions Test

The Personal Orientation Dimensions Test (POD) showed that, for the subjects for whom we had pre-test and post-test scores, all of them sustained marked improvement in mean scores for the thirteen personality dimensions tested by the POD. Let it be emphasized that our interest was primarily directed to the four Polarity Scores in which each individual subject expanded in various facets of the thirteen dimensions.

It will be readily noted that in the POD tabulation, eleven out of thirteen cases increased their means of potentiation in the areas of personal orientation. Individual profiles have been provided separately. With reference to the Actualizing Polarities, all subjects showed substantial increases in the overall picture of their growing sensitivity to issues of human import. We were especially impressed with the manifest changes in the Weakness-Strength polarity in all subjects for whom we have test scores, (in concert with evidence gained from the Ben-der-Gestalt Test and other tests discussed and examined).

If one should examine the Polarities scoring profile, it could be inferred that perhaps some of the deviations were not necessarily bad because of apparent "control" devices working in their inter-personal relationships following the incredible physical and emotional changes resulting from the megavitamin therapy covering only a period of eight days.

One unfavorable facet of the testing program with the POD arose for the reason that there was a policy in the institution of rolling entry into the program. On the first testing date, there was a total of 26 testees for whom we were unable to get computer printouts on the thirteen phases of the POD.

Between the ninth day (second testing) and the twenty-sixth day (third testing), an unfortunate incident occurred which eventuated in the expulsion from the Institution's Drug Program of nine inmates en masse. This came as a consequence of patient Number 2's being allowed to make a court appearance unescorted by a counselor from the facility following the second testing. This court appearance was made on June 9, 1980.

A letter was written to the presiding judge indicating this patient's testing results, while describing for the judge the type of treatment this patient was receiving. This individual's appearance in court was for the purpose of receiving two separate drug offense sentencings by the judge. The judge was so pleased with the patient's current progress that he dismissed jail time and placed the patient on probation.

Following his court appearance, the patient, being unescorted and being very elated regarding his court appearance, took a taxi to his home to inform his wife and mother of his good fortune. While at his house the patient picked up his secreted "stash" of marijuana and took it with him to the hospital. Unfortunately, this patient was not searched upon his arrival, as was the custom, so he hid his "stash" of marijuana on the premises. On the morning of June 11, 1980, this patient smoked a "joint" in a laundry room, blowing the smoke out of a window. However, two patients smelled the smoke, and acting in accordance with program rules, they reported this occurrence to the head counselor. The head counselor in turn brought all patients into a conference room and enforced a no-talk rule. All the counselors then began to one-by-one interrogate each patient until they determined who had violated their rules by smoking marijuana and in so doing, discharged eight other patients in the process for their "attitude." It should be understood by the reader that we had no authority over the counselors or their method of operation.

The POD scores were impressive because not one of these individuals scored in the pathology range in any of the thirteen personality dimensions. One interesting feature of the POD test scores was that of those who subsequently entered our program (after initial testing) and took the POD for the first time at what was to be the "second testing" for the first group. In other words, this second group of patients had been receiving treatment for one week prior to their first testing and not one single individual had a mean score in the pathology range. Only

one individual (not an inmate but an employee of the hospital, and who has not figured in our reportable data) received an index of pathology in any of the thirteen personality dimensions, and that was one score in integration-potentiation, a score of 70! We feel that a record of improvement overall, like this, is dramatic, and we must clarify the issue of one invalid POD profile. Patient Number 15, who was not a court-appointed inmate, and who had taken advantage of the law permitting self-admission to a State-run addictions program, had entered because he was aware that he needed help for his alcohol and drug problem. In the beginning, this patient was not very communicative with the population and the counselors took the position that he had a "bad attitude" and were considering discharging this patient. The patient was very upset over this because he felt that since he was there voluntarily, he did not have to participate in the same manner as did the court-appointed patients. He went through the motions of testing and received 10 of 13 scores in the very severe pathology range. Interestingly enough, his "potentiation" score was 44, while his "love" score was 74! And his "synergistic integration" score was 67! These can neither be explained nor justified inasmuch as all four polarities were pathologically expansive in his test results showing extremes in the direct polarities of Anger and Love and in Strength -Weakness.

Typical examples of positive change continued to show in specific patients like number 5, number 20, and number 29. We would like to isolate some impressive personality dimension improvement in these

GRAPH III
Results of POD Testing

N-13	**Pre-Test**		
Patient	**Sun of Scores**	**Mean**	**Standard Deviation**
Number 1	332	12.38	4.32
Number 2	382	14.69	2.78
Number 3	302	11.62	3.99
Number 5	348	13.38	2.59
Number 8	320	12.31	5.68
Number 13	294	11.31	4.70
Number 17	300	11.54	3.32
Number 18	282	10.85	3.94
Number 20	342	13.15	2.66
Number 26	339	13.00	3.09
Number 27	308	12.23	2.04
Number 28	392	14.31	3.36
Number 29	362	13.92	4.36
N • 13	**Post-Test**		
	Sum of Scores	**Mean**	**Standard Deviation**
Number 1	371	14.27	4.15
Number 2	383	14.73	3.94
Number 3	315	12.12	4.19
Number 5	329	12.65	4.14
Number 8	358	13.77	4.88
Number 13	338	13.00	4.05
Number 17	312	12.00	3.34
Number 18	284	10.92	3.62
Number 20	363	13.96	3.48
Number 26	354	13.62	4.04
Number 27	350	13.46	3.84
Number 28	387	14.88	4.10
Number 29	359	13.81	4.65

* Decrement

three subjects.

Patient number 5, a 29-year-old male, who had been on drugs since he was thirteen, had shown remarkable decreases in psychopathology and total detoxification in the first few days. With the median score being 50, Patient number 5 made these changes from 32 to 60 in Strength; from 34 to 64 in Weakness; from 48 to 67 in Synergistic Integration; from 20 to 58 in Creative Living; and 40 to 62 in Mission; with a concurrent drop in Manipulative Awareness from 69 down to 59.

Patient number 29, a male in his forties who had also had a life-long history of drugs and crime, had spent more than 25 years of his life behind prison bars, who had been in this facility for four months prior to our arrival, received scores like these: in Time Orientation, an increase from 47 to 66; in Core-centeredness from 52 to 76; in Strength from 50 to 60; and in Weakness from 28 up to 42, with moderate increases in all other scores.

It is very unfortunate that a complete score battery is not available on more of our patients through pre-testing and post-testing. It is our honest opinion that the overall look of the POD profiles (notwithstanding the fact that 25 of them were taken after the date of first, or pre-testing) is so favorable and so supportive of other solid data that it fully justifies our previous total dedication to this program of treatment for alcohol and drug addiction.

Hoffer-Osmond Diagnostic Test Results

As we had no previous contact or knowledge of the general psychological makeup of these patients, we felt that it was imperative to assess quickly certain vital areas. The depth of depression and possibility of suicide are vital. Furthermore, we needed to know of any psychoses with their varied potential for homicidal tendencies or other potentially harmful actions. One can obtain such information with careful questioning and probing, but when one needs the information quickly and accurately, one can antagonize or disturb patients by poor use of questioning or pressing too intently. Convincing them to take a HOD test will avoid any real problems.

The HOD Test has 145 questions presented in a simple straightforward manner. The patient is simply testing himself and therefore tends to answer truthfully. Thus, this test can be done quickly (30 minutes or less) and can give the clinician valuable and reliable information with which to make quick and vital judgments. Thus, one avoids simply using his own personal judgment. Mistakes in this area can cause grave consequences. The HOD Test results reveal perceptual distortions, the total extent of the psychological illness, paranoid tendencies, and degree of depression. Therefore, one is immediately ahead of the clinical problem knowing the nature of an illness.

Realistic judgments are thus quickly made and one can act with a high degree of self-assurance. It is reassuring to the patient to be able to tell him what he already knows about himself and most importantly, that he can be helped.

In the compilation of test data from Hof-fer-Osmond Diagnostic Test, the overwhelming conclusion to be drawn is that the majority of our scored subjects showed a very favorable improvement in several areas specifically defined by HOD testing. The twenty patients who were able to remain in the treatment program for the full time, and to go through the prescribed three sittings for periodic testing, earned scores that were, in several instances, phenomenal. For example, there were sixteen of the twenty who ranged in improvement in total score from a high 122 points down to a low 2! Once again, we'd like to isolate three or four of these for discussion. Patient number 5 plummeted from a total score of 126 down to 19; and in his depression score, he moved down from a raw score of 14 to 1! This was well in keeping with our expectations of him since we had Bender-Gestalt and POD scores already. Patient number 20 dropped from a high total score of 122 down to 22! And, this same subject's depression score dropped from a 14 down to a 2! Patient number 13 was following in the anticipated pattern of score reduction in the HOD test, also. However, the scores

attained in her final HOD testing were a puzzle. This patient was extensively questioned due to her overall excellent improvement in all other areas. It was determined that just before she took the HOD test, she drank a can of root beer because she was nervous, thirsty, and wanted to do well on the test. This questioning was a surprise to her because she felt she had really done well. If we wanted an argument over the effects of drinking sugar-loaded soft drinks, this looks like a good place to start. Notice the TS (Total Score), the PerS, and the RS scores. She went from normal to the Schizophrenic range just as quickly as it took to drink the contents of a can of root beer.

Of course, paradoxical scores should be accounted for; therefore some discussion of Patients number 17 and number 29 is in order.

Patient number 17 was a graduate chemist who had been precipitously dislodged from his home and work because he had freaked out on "uppers" and was unmanageable. He had a business, with several employees, which fell to ruin and faced imminent financial disaster. He was, as he put it: "climbing the walls." In any case, his scores are explained by the fact that he was a seasoned test-taker, and he had the sophistication to read all of the true-false questions before taking the tests, and to discern that all of the "True" answers were in a uniform column, so he just drew a line through all the "T's" on all four pages of the test, having discerned the nature of the questions.

Patient number 29 also was a "sophisticate" in that he had spent more than a quarter of a century in jail and four months in this facility and was very accustomed to extensive testing procedures. Obviously, these three test protocols are invalid. In addition to these two deviations, we have four other exceptions: Patient number 13 (explained later); number 19; number 15 (also explained later); and number 25, who actually increased their total scores in post-testing. Patient number 15 showed no change at all, either in total score or depression; and all of his scores were uniformly low throughout the HOD Test.

Patient number 19 had been in the special locked ward for PCP'ers for 18 months prior to his being able to enter the program with judicial approval—one of the avenues often chosen for earlier release from custody. The untoward increase in his acceptably low scores in Total Score and Depression (a 16 and a 3.2 respectively) is explained by the fact that his decontamination regimen (and here we mean the massive ingestion of vitamins to rid his body of a gut-level craving that had lingered on) gave him physical, mental and emotional opportunities to deal in, and handle social and emotional involvements long in abeyance. These newly renewed emotional involvements were opening up to him so rapidly that he was unable to integrate well.

Much the same consequence befell patient number 25, who had a rise in Total Score from 3 to 33; and in Depression from 0 to 4. This individual was a bright, aggressive male who had had a long time prison history as well, and did not adequately deal with the new feelings he was required to be responsible for. An interesting facet of his apparent disorientation deserves consideration; the last question on the HOD. This question is: "I am not sure who I am." To this he answered: "True." Dr. Libby queried him specifically about this response, and he replied: "Well, that's true. When I first came into the program I was pretty sure of who I was and now after being here for this short time, and taking this treatment, I'm not really sure about who I am because of the changes I have gone through."

We are, in a sense, allowing the figures to speak for themselves. For example, one sees what we consider to be phenomenal changes in patients number 3, number 5, number 8, number 20, number 24, number 26 and number 28. In a descending order, but still impressive, are most of the remaining members of our intact group (for whom we have pre-test and post-test scores).

We were able to administer only the first and second of the three scheduled HOD Tests for patients number 4, number 6, number 7, number 9, number 11, number 12, number 16, number 22 and number 23. Of these nine patients, seven were clearly

on a path of continuing improvement and self-growth as evidenced by the comparative scores. For example, patient number 11 dropped from a Total Score of 119 down to 34, and from a Depression Score of 10.8 down to a 4.9! The six other scored protocols that showed improvement did, indeed, document therapeutic pluses. The remaining two subjects (number 6 and number 9) showed slight to moderate increases in pathology. We can only remark that these nine subjects were expelled soon after the second

battery of testing from the program. We view this as a very unfortunate by-product of bureacracy and lack of communication between the County employed Drug Program Directors and the Director of the Libby Institute, which was not a functioning part of County government. We are quite ready to recognize the need for institutional policy to prevail for most situations, yet we regret that we could not maintain our original cadre of 29 patients intact.

GRAPH IV
Hoffffer-Osmond Diagnostic Test—Test Results
9 Patients Given Two Tests 9 Days Apart

Patient Number 4		**Patient Number 6**		**Patient Number 7**	
TS	1-1	TS	6-9	TS	10-2
PerS	0-0	PerS	1-3	PerS	1-2
PS	0-0	PS	3-2	PS	3-0
DS	0-0	DS	1-1	DS	0-0
RS	2-2	RS	6-9	RS	.20-4
SF	0-0	SF	0-1	SF	0-0
Patient Number 9		**Patient Number 11**		**Patient Number 12**	
TS	12-28	TS	119-34	TS	49-10
PerS	3-9	PerS	28-8	PerS	15-1
PS	1-3	PS	7-3	PS	4-3
DS	4-5	DS	11-7	DS	5-1
RS	3-5.6	RS	10.8-4.9	RS	9.8-10
SF	0-0	SF	9-2	SF	5-1
Patien t	**Number 16**	**Patient Number 22**		**Patient Number 23**	
TS	28-25	TS	24-14	TS	57-16
PerS	4-2	PerS	5-4	PerS	10-3
PS	3-2	PS	3-4	PS	5-1
DS	1-2	DS	0-0	DS	7-5
RS	28-12.5	RS	48-28	RS	8.1-3.2
SF	2-1	SF	4-3	SF	5-0

GRAPH IV A
Hoffffer-Osmond Diagnostic Test—Test Results
20 Patients Given Three Tests

Patient Number 1		**Patient Number 2**		**Patient Number 3**	
TS	42-11-17	TS	21-18-4	TS	67-70-35
PerS	6-1-0	PerS	3-2-1	PerS	15-16-8
PS	2-6-0	PS	0-1-0	PS	3-3-2
DS	8-5-5	DS	1-2-0	DS	7-9-6
RS	5.25-2.2-3.4	RS	21-9-8	RS	9.6-7-8
SF	2-0-0	SF	1-1-1	SF	3-5-2
Patient Number 5		**Patient Number 8**		**Patient Number 10**	
TS	126-57-19	TS	111-22-10	TS	14-6-6
PerS	30-20-7	PerS	24-5-2	PerS	1-3-0
PS	10-4-2	PS	9-1-2	PS	2-1-0
DS	14-2-1	DS	11-2-0	DS	5-1-1
RS	9-28.5-19	RS	10.1-11-20	RS	2.8-6-6
SF	16-9-3	SF	8-2-2	SF	0-0-1

Patient Number 13		Patient Number 14		Patient Number 15	
TS	19-18-34	TS	15-29-2	TS	3-0-3
PerS	3-1-9	PerS	5-9-1	PerS	1-0-2
PS	1-2-2	PS	2-5-0	PS	1-0-0
DS	5-7-3	DS	1-0-0	DS	1-0-0
RS	38-2.6-11.3	RS	15-58-4	RS	3-0-6
SF	1-2-4	SF	3-4-0	SF	0-0-0
Patient Number 17		**Patient Number** 18		**Patient Number** 19	
TS	0-0-0	TS	14-25-5	TS	16-53-78
PerS	0-0-0	PerS	0-2-2	PerS	2-15-25
PS	0-0-0	PS	1-3-3	PS	5-5-7
DS	0-0-0	DS	1-1-0	DS	5-2-3
RS	0-0-0	RS	14-25-10	RS	3.2-26.5-26
SF	0-0-0	SF	1-2-0	SF	0-2-7

GRAPH IV B

Patient Number 20		Patient Number 21		Patient Number 24	
TS	122-20-9	TS	4-8-0	TS	84.16-0
PerS	27-4-2	PerS	0-0-0	PerS	21-1-1
PS	8-0-0	PS	0-0-0	PS	5-3-2
DS	14-2-2	DS	1-4-0	DS	10-3-2
RS	8.7-10-4.5	RS	4-2-0	RS	8.4-5.3-0
SF	12-1-0	SF	0-2-0	SF	9-2-0
Patient Number 25		**Patient Number 26**		**Patient Number 27**	
TS	3-13-33	TS	44-11-2	TS	23-5-2
PerS	0-2-7	PerS	11-1-0	PerS	2-1-0
PS	0-1-4	PS	4-0-4	PS	4-2-0
DS	1-2-1	DS	5-3-0	DS	4-1-2
RS	3-6.5-33	RS	8.8-3.6-4	RS	5.75-5-1
SF	0-1-4	SF	4-1-0	SF	1-0-0
Patient Number 28		**Patient Number 29**			
TS	92-73-39	TS	0-0-0		
PerS	23-19-11	PerS	0-0-0		
PS	8-7-6	PS	0-0-0		
DS	8-3-2	DS	0-0-0		
RS	11.5-24.3-19.5	RS	0-0-0		
SF	8-6-5	SF	0-0-0		

Abbreviated Case History

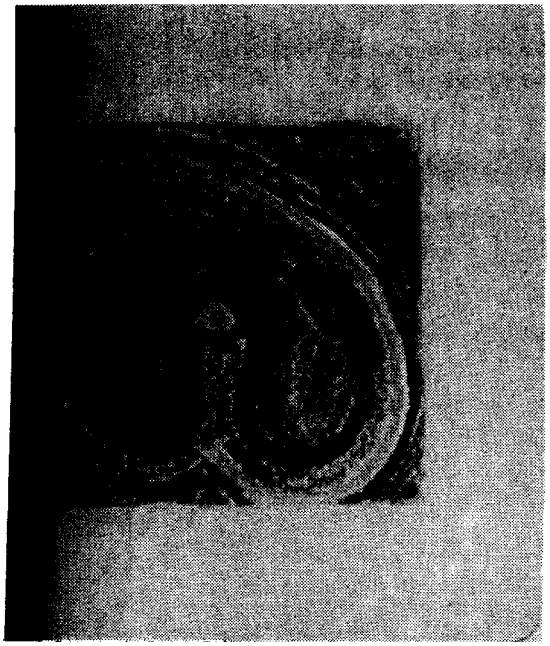
This patient was a black female, 45 years of age, who had served prison time for armed robbery to support her heavy heroin habit. She appeared dull and listless, and she constantly wore a heavy coat because she complained of always being cold.

What makes this case history so interesting is that she had been in this rigidly controlled institution for six months prior to our arrival and had been receiving the traditional, confrontative therapy for her rehabilitation. This facility periodically and randomly tests all patients for drugs in their system via the urine method. If a patient is found with drugs in his/her urine, he/she is immediately discharged. The assumption, therefore, is that she was apparently drug-free for that six months' interval.

Her first Bender-Gestalt score was 98.50 for pathology; and her first HOD Total Score was 122; the PerS was 27; the PS was 8; the DS was 14; and the SF was 12. Exactly nine days later, a second HOD Test was administered along with a second Ben-

der-Gestalt Test. The Bender-Gestalt pathology index was now 75.25; and the HOD scores were: TS-20; PerS-4; PS-0; DS-2; and the SF was 1. Seventeen days later, a third testing took place. The Bender-Gestalt Pathology Index was down to 41; and the HOD scores were down to: TS-9; PerS-2; PS-0; DS-2; RS-4.5; and SF-0.

This woman's entire attitude, personality and disposition changed and paralleled the test results. Her heavy overcoat came off, and she began to participate in group athletic activities. The patient was given two variations of the Peabody Picture Vocabulary Test. Her first score was 111. Thirty days later we conducted a second Peabody and her score had elevated to 131! This patient's art work also changed dramatically, as did her clinical condition—for the better! Our last contact with her was when she asked for a letter of reference to enter college for a Social Science major in September, 1980, and is still actively enrolled at this writing!



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Conclusions

1. Perhaps the major and primary conclusion to be drawn is that in all forms of addiction, the psychological component is of minimal concern provided the patient is first decontaminated, using sodium ascorbate. As the charts indicate, practically all major pathology of the psyche and mental malfunctions disappeared.

2. Traditional psychological or psychiatric techniques are for the most part completely ineffectual in an alcohol or drug addiction population. This conclusion is drawn from the fact that patients number 20 and number 29 were classified as schizophrenic. Patient number 20 had been in this facility for six months prior to our arrival and patient 29 had been in this facility for four months receiving the traditional counseling previously described.

There is further evidence that these traditional techniques used in the alcohol and drug population are obsolete and that these patients' needs were not being met. Notice the "revolving door" admission and discharged or voluntarily left the program figures prior to our arrival.

3. The recidivism rate in alcohol and drug addition is well known. The conclusion we draw from this study is that in the so-called prevalent therapies, it is true that patients can be "detoxified," but they are not decontaminated to the degree that they are freed of the guts-level craving for addictive drugs or alcohol. We recognize that by applying present techniques this "guts-craving" level cannot be quantified. We can draw the conclusion nonetheless that we accomplish this most important goal by the following data: positive changes occurred in the psychological, IQ, blood chemistry, urinalysis, Cortisol levels, energy levels, attitudes of the patient and his freely given statement that he feels great and no longer has any "craving."

4. It is of interest to point out patients number 3, number 9, number 14, number 15, number 19, and number 25 scored higher in the second HOD Test than they did on the first. Patient number 19 has already been singled out for discussion, but the remaining five patients also had the same addiction! We conclude from this that once the anesthetizing effects of PCP come out of the brain, the true personality potentials are evidenced and come to the surface. It is evident that the more heavily addicted user of PCP requires longer therapy than the more traditional drug or alcohol offender.

5. One will note the Bender-Gestalt initial test classifies four patients as schizophrenics, while the HOD initial test classifies 11 patients as schizophrenics. The conclusion we are able to draw from this is that the Bender-Gestalt Test isolates psychopathology with a broader scope than does the HOD. The Bender is governed more by psy-chodynamic delineations than is the HOD which, in its own way, provides almost in-stantaneous evidence of paranoia or schizo-phrenia. The HOD does not concern itself with viable psychiatric diagnosis, and merely confirms patient behavior that is "schizophrenic-like" or "paranoia-like." The Bender-Gestalt scoring system is discrete enough to identify a dozen or more schizophrenias—from hebephrenia to simple schizophrenia. These considerations—in and of themselves—seem to justify the emphasis on the HOD Short Form and the addition of other, equally sophisticated, psychological tests.

6. Patient number 28 also requires a singling out for discussion. In the Bender-Gestalt testing, this patient scored in the neurotic range on two occasions, then in the last test scored in the normal range. In the more clinically sensitive HOD, this patient is still categorized as schizophrenic, even though he has made good improvement. Once again the HOD displays well in its subdivisions scoring, namely, the Ratio Score (RS). His Ratio Score on the three tests were 11.5; 24.3; 19.5. Hoffer and Osmond explain these scores by stating, "It was found to make a sharper discrimination between schizophrenics and non-schizophrenic psychiatric patients than any of the other scores. We can conclude from this that the patient still has an unresolved problem, but that is not due to schizophrenia.

7. In view of the fact that we are involved in a heuristic study and refinement of treatment techniques, we are enlarging on our intake and psychological evaluations by now using the Minnesota Multiphasic Personality Inventory (MMPI), the Kuder Preference Record, and the Wechsler Adult Intelligence Scale (WAIS) along with the HOD, to provide better clinical bases to compare the psy-chodynamics of patients.

8. The selection of the WAIS supports our contention that more discrete IQ testing will be helpful. The WAIS supplies up to 12 factors in verbal and non-verbal areas to isolate intellectual gaps and other deficit areas. It is still a major theoretical paradigm that IQ's do not change. In the areas of addiction we are drawn to the conclusion that intellectual capacities are suppressed by alcohol and drug contamination and that our treatment specifically releases forces that allow fuller potentiation of native, basic intelligence.

Summary

In some circles, psychological testing is not essential for diagnosis, prognosis and treatment, according to the medical model. However, it is an unquestioned dictum in the field of clinical assessment of the mental and emotional states of patients that psychological studies be done. Were it not for the discretionary capabilities of the projective, as well as the objective, clinical tests now available in abundance to psychologists and psychiatrists, many, many unlucky and undesirable assessments might be made.

The matter of reliability, validity, and objectivity of the tests used in this study is unimpeachable! Each of the tests has had a twenty-year (or longer) period of statistical testing and verification of comparative results. We, therefore, offer the results of this study as a preliminary statement of the first of many in a series of concurrent studies which will involve orthomolecular regimens of treatment for the rehabilitation of the addicted user, whether it be merely of toxic drugs or alcohol, or the hallucinogens of any type, or, as an opening wedge into the relatively unknown, a sensible treatment for toxic gas poisoning or insidious agent entry into the blood stream, such as Agent Orange which we have already successfully treated.

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