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Sheppard Air Force Base  
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USAF School of Aerospace Medicine  
Aerospace Medical Division (AFSC)  
Brooks Air Force Base, Texas

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AIR FORCE BEHAVIORAL SCIENTISTS

Edited by

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USAF School of Aerospace Medicine  
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Brooks Air Force Base, Texas

September 1968

The viewpoints, opinions and conclusions stated in this publication are those of the individual authors and do not necessarily represent or reflect official USAF policy.

## FOREWORD

I heartily encourage participation in professional symposia such as you are conducting. These gatherings afford an opportunity for discussion of problems and accomplishments as well as providing for exchange of ideas. Most of the basic concepts of industrial and community mental health originated and were developed in the subspecialty of military psychiatry with essential support from the other disciplines of the mental health team--clinical psychology and psychiatric social work. These contributions to American psychiatry are increasingly recognized. There is a need, however, for continuous redefinition and formulation of policies and technics to meet the changing needs of the military community. The subjects for discussion at this Symposium demonstrate this need and identify some of the challenges which face the behavioral sciences and the medical profession.

Best wishes for a stimulating and productive session.

K. E. PLETCHER  
Lieutenant General, USAF, MC  
Surgeon General

## PREFACE

The Fifteenth Annual meeting of USAF Behavioral Scientists was again sponsored by the USAF School of Aerospace Medicine and held at the Medical Service School, Sheppard Air Force Base. This type of split operation was only possible through the fine cooperation of the USAF Hospital, Sheppard and the Host Officer, Lieutenant Colonel Thomas F. Ednie, USAF, MC.

The program committee, composed of Major Lewis H. Richmond, USAF, MC for Psychiatry and Lieutenant Colonel Jack A. Davis, USAF, BSC for Psychiatric Social Work and Lieutenant Colonel Richard E. McKenzie, USAF, BSC for Clinical Psychology shared the opinion that an annual meeting of this sort should, and could, present both informative papers and stimulating concepts. Therefore, we selected the theme of "Behavioral Modification" intending to present both the "new look" in therapeutic intervention as well as the more traditional. We also felt that Air Force Behavioral Scientists have never been able or willing to practice apart from an involvement in the wider aspects of community and social problems affecting the civil as well as the military environment. Accordingly, we devoted the major joint disciplinary meetings to these topics in the tradition of the behavioral team approach which has long marked the military approach to the diagnosis, treatment, and prevention of disorder in human behavior and mental health.

Doctors Davis and Richmond join me in extending our heartfelt appreciation to all who aided us in presenting this symposium and its proceedings.

We are especially indebted to Sergeant Stephen G. Linowiecki who performed the many duties of an assistant editor.

RICHARD E. MCKENZIE, Ph. D.  
Lieutenant Colonel, USAF, BSC  
General Chairman

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KEYNOTE PRESENTATION:  
SOME COMMENTS ON BEHAVIORAL MODIFICATION

Richard E. McKenzie

Distinguished guests, colleagues in the behavioral sciences, ladies and gentlemen; this year, through some involved set of circumstances, I found myself once again charged with the task of general chairmanship of this symposium. This time I felt that I could be somewhat presumptive and take advantage of the chairmanship and possibly go several up, but maybe no more than one down, by assigning myself the first spot on the program. Actually, I did not intend to be so presumptive as opportunistic, because here I have the opportunity to both introduce the theme of the conference and to set the stage for some points of discussion and possibly some areas of contention.

Our main theme this year is behavioral modification and topics related to psychotherapy. Now you know what psychotherapy is. It has been defined as "an unidentified technic, applied to unspecified problems, with unpredictable outcome." And we all know that for this we require rigorous training.

It is true that we have better definitions of psychotherapy, and even if these are not entirely satisfactory, it would not be impossible to define what psychotherapy is or should be. However, it is difficult to establish a criterion, or set of criterion measures, which will enable us to evaluate the effects of psychotherapy. It is fair to state, that even as an academic exercise, the effects of psychotherapy should be amenable first, to an accurate definition with a statement of hypothetical parameters. Second, the study of the effects of psychotherapy should be similar in methodology and experimental treatment to the study of any other therapeutic agent about which definite theories are held. As a matter of fact, this is far from the truth.

Many rabid practitioners of psychotherapy appear to take the position of Galen, the father of modern medicine, when he advocated the worderous powers of Samian clay which

was mixed as a liqueur and drunk as a therapeutic agent. Galen stated that "all who drink this remedy recover in a short time, except those whom it does not help. These all die and have no relief from any other medicine. Therefore, it is obvious that it fails only in incurable cases."

Now others would have a very different view. In fact, several years ago, a psychologist whose views do not necessarily attract me, but whose professional credentials place him in the position of a voice to be heard, stated: "With a single exception of the psychotherapeutic methods based on learning theory, the results of published research with military and civilian neurotics . . . and with both adults and children, suggest that the therapeutic effects of psychotherapy are small or nonexistent, and do not in any demonstrable way add to the nonspecific effects of routine medical treatment, or to such events as occur in the patient's everyday experience" (1).

In his 1961 address to the American Academy of Psychotherapists entitled "Psychotherapy Today--or Where Do We Go from Here?" Carl Rogers said that the field of psychological counseling and psychotherapy is "in a mess." Rogers briefly elaborates the overall "mess" by observing that: (1) there is deep disagreement as to the theoretic framework within which therapy takes place; (2) there is a lack of agreement as to whether a given aspect or experience in therapy is helpful or harmful to the client; (3) there is a lack of consensus as to the goals in therapy; (4) there is no substantial agreement as to what constitutes successful outcomes and unsuccessful outcomes of therapy; and (5) there is disagreement as to promising directions in future developments in the field (6).

Just to consider a few of the specific areas of disagreement--and not even daring to consider theoretical disagreements--I could name:

1. Insight - What is the role of insight in psychotherapy? Is insight a necessary condition for successful therapy? What is its function? Munroe has emphasized the fact that in Freudian and Neo-Freudian disciplines the development of insight by the patient is the "crux of the psychotherapeutic process." On the other hand, there are those who disagree with this view and hold that insight is at best a secondary factor and not a requisite for effective results in psychotherapy. For example, Lewis (4) in a recent paper on future developments in psychotherapy, predicts that

"Insight will not be stressed as it has been since its usefulness is quite limited in so many cases." Hobbs (3) has noted that insight as such no longer occupies a place of importance in client-centered psychotherapy. Neither, may I add, does diagnosis.

2. Relationship - What is the role or function of relationship in therapy? Is the relationship between patient and therapist central to the process? What about the nature and extent of the phenomenon of transference in therapy? For some this factor is fundamental while for others it is apparently irrelevant, unnecessary, or even undesirable. What about the degree of activeness or passiveness of the therapist? How directive is the therapist? Menninger (5) characterizes psychoanalysts as "quiet observers," "listeners," "occasionally commentators," and as "predominantly passive" in the treatment process. How much does the therapist talk compared to the patient? One study by Seeman and Raskin (7) showed that in both psychoanalytic and client-centered approaches, the patient did about 70 percent of the talking.

3. Length of therapy - J. D. Frank (2) apparently shows us that therapists who assume that long term therapy is necessary, find that their patients take a long time to improve while therapists who practice short term therapy find that their patients improve in a short time. Snyder (8) concludes that there is little or no relationship between duration of therapy and degree of improvement.

4. Objectives of psychotherapy - Is it making the unconscious conscious? Is it developing and handling a transference relationship to produce insight that, in turn, will lead to improved adjustment? Is it the reconditioning of maladjustive habit patterns? Is it the modification of the individual's phenomenal field and increased self-acceptance? Is it helping the person depropagandize himself, to develop realistic attitudes toward himself and others as well as a rational philosophy of living? Is it the reorganization of the person's ego? Is it to help the patient apply the scientific method to the solution of his own problems--that is, to formulate testable hypotheses and develop new constructs or expectancies about himself and his perceived world?

Clearly, even these few issues seem to hurl a challenge to produce scientifically acceptable evidence that supports the practice of therapeutic behavioral modification. It is

also apparent that the scientific investigation of psychotherapy can be faulted on the basis of a lack of development of criterion measures. But before we can develop criterion measures we must ask therapists the right questions. More specifically I feel we must ask, what does any modifier of behavior have to deal with? And I think that ultimately for behavioral change to occur, there must be a recognition of an unsatisfactory present adjustment and a desire to effect a corresponding change. All therapies must somehow set the stage for this process by providing a relationship--a therapeutic atmosphere. However, beyond this, the therapist must recognize that the structural elements, the framework upon which the basic components of behavior are hung, are those of the patient. The patient reveals this framework during the course of therapy as he reveals his percepts of his own physical, social, and emotional world. In fact, then, the patient provides the building blocks from which the structure of his personality and its behavioral components were formed, and it is these materials which must form the basis of a new or altered structure.

With gratuities to Henry Stack Sullivan (9), I have often considered that in the modification of human behavior the therapist may really play only the role of a consensual validator. It seems that many clients require that little be added in the way of insight and information in order for them to make a wise or correct decision. Perhaps they merely require a consensor--someone who will validate the patient's own percepts.

I say this because what can be constructed or created in therapy without the client's own building blocks? Even in the so-called deeper forms of therapy the client may be seeking validation for his feelings of hate or aggression toward some figure in his life. He may bring in all the facts of his life which point to this, then say, "Ah, yes! I really do hate thus and so; now that I have a consensor I can really believe it." Perhaps successful therapy follows the same kind of process of continual validation and re-validation of physical, social, and psychologic factors that we see when the child who has seen the sun set and the world enveloped in darkness asks, "Daddy, is it dark out?" He asks in effect, "Do I really see what I see, or think I see?"

Irrespective of the particular "school" of therapy, the ultimate goal of therapy is some degree of intellectual and emotional understanding and resultant behavioral modification. The important reason for a lack of understanding may be a

profound defensiveness on the part of the patient. This defensiveness may have its inception and continual reinforcement in the censor-type role played by the objects in his environment which state, in effect, "you do not really know what you think you know about your physical, social, or emotional percepts." This would seem to be a fundamental design for anxiety and insecurity which the mechanism of consensual validation may contravene, and this may be what good therapy really amounts to.

If one were to analyze many of my comments to this point in technical psychotherapeutic terms, one would have to say that I have been facilitating regressive phenomena, possibly even promoting negative transference. This is probably true, but like the therapist, I do this only to arrive at progressive processes. In this case, the progressive processes take the form of professional knowledge, insight, and fellowship all of which are desirable goals of our symposium. As in therapy, the regressive process is reversed at the point of "working through" so that progressive phenomena can take place and take precedence.

#### Acknowledgment

I am indebted to Dr. Daniel G. Brown for his presentation in a previous Proceedings (January 1964) which stimulated many of my comments and from which I have freely borrowed.

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## GOALS OF TREATMENT

Norman Q. Brill

For some time I've been impressed with the relative lack of emphasis on the entire subject of goals of treatment, and when I learned that a symposium was planned on the subject of behavioral therapy, I thought it would be a very appropriate time to talk about goals of treatment knowing full well I'd be talking about nothing new but merely inviting special attention to it. To be sure, there is some kind of goal involved in every patient's treatment but often it is vague and not clearly conceived. The shifting of goals occurs as a result of a patient's progress in treatment and with greater understanding of a patient's illness that occurs with continuing contact. But more often than we like to think, the vagueness of goals is a manifestation of the present limited state of our knowledge about mental and emotional illness that does not permit more precise formulations. "Playing it by ear" is fine if one really understands what one is hearing and seeing which is not always the case. It is no longer a surprise to us that what goes on in treatment may be to gratify something in the therapist (counter transference) and that many times there is a discrepancy between what the therapist thinks the patient wants and what the patient wants.

Rudolf Dreikurs (2), in discussing Adlerian psychotherapy, emphasizes the fact that it is always goal directed and that the crucial factor influencing the type of cooperation between the doctor and the patient is the nature of each other's goals. He says:

"In other words, therapy will progress when the goals of the patient and the goals of the therapist are in line with each other. Any resistance is due to the fact that the goals do not coincide. Regardless of how friendly they are with each other, regardless of how much appreciation, how much love and devotion might exist, if their goals don't coincide, no cooperation is possible. In this sense, then, the therapeutic relationship is in no way different from any other relationship

which requires close cooperation. Cooperation can't exist if two people have opposite or mutually exclusive, or antagonistic goals."

To the extent that psychiatric disorders are purposeful, one can of course expect resistance on the part of the patient to giving up his symptoms. The psychiatrist who is trying to remove the patient's symptoms and alter his behavior then has a different objective. But there is a healthy part of the patient's ego that is in alliance with his doctor; that makes him seek help to begin with and it is this part to which attention must be paid.

Otto Will (4) reminds us that in treating a patient it is not necessary that one's theories be right in all aspects, but it is important that the therapist be aware of his theories and be willing to recognize their limitations. He states, "The therapist will find it useful to formulate concepts relevant to what he is doing professionally; otherwise his work may be disadvantaged by motivations private and unsystematized that operate out of his awareness."

In this connection the remarks of T. C. Chamberlin (1) seem well worth recalling. In 1890 he published an article on the dangers of the single working hypothesis. This did not have psychiatrists in mind but appears to be particularly applicable to psychiatry.

"The moment one has offered an original explanation for a phenomenon which seems satisfactory, that moment affection for his intellectual child springs into existence; and as the explanation grows into a definite theory, his parental affections cluster about his intellectual offspring, and it grows more and more dear to him, so that, while he holds it seemingly tentative, it is still lovingly tentative, and not impartially tentative. So soon as this parental affection takes possession of the mind, there is a rapid passage to the adoption of the theory. There is an unconscious selection and magnifying of the phenomena that fall into harmony with the theory and support it, and an unconscious neglect of those that fail of coincidence . . . There springs up, also an unconscious pressing of the theory to make it fit the facts, and a pressing of the facts to make them fit the theory."

I could find only one specific psychiatric textbook index reference to goals of treatment and that interestingly was to the chapter by Urban and Ford about behavior therapy (3). I don't mean to imply that goals are not considered, but it is interesting to see how most references to it are indirect or at least not indexed. If one considers just psychotherapy (and not psychiatric treatment in general) there is quite an extensive literature.

When a patient goes to a physician with a pain in the right lower quadrant, he expects the physician to make a diagnosis and recommend treatment that will relieve the pain. If a diagnosis of appendicitis is made and surgery recommended, it is with the expectation that after the surgery is performed the pain will be gone. There is also the expectation that if the surgery is not performed that the pain will not only persist, but get worse and even threaten the patient's life.

There are other conditions like arthritis that the physician may be able to help but not cure. There are some that need continuing medication for life, like diabetes where insulin is required, Addison's disease where cortisone is needed, or hypothyroidism where thyroid is required.

For some conditions like hay fever, desensitization is indicated. For obesity, dietary control; for some, change of climate; for some, like a stroke, rehabilitation without expectation of return to complete normality.

For something like primary syphilis, not only must the chancre be cured, but adequate treatment given to prevent later complications. This used to be a more serious problem when antibiotics were not available.

There are parallels in psychiatry, and just as with somatic diseases, the type of illness should determine the treatment. Unfortunately the nature of a patient's emotional difficulty is not always as clear-cut as are many of the somatic disorders, and it is more often necessary to do an extended work-up (as has to be done with somatic disorders that are not clear-cut) to determine the nature, extent, and causes of patient's difficulty. The fact that we are dealing with a whole person and not some particular organ makes the problem very much more complex. There are other differences too; the treatment of appendicitis or of a fracture is pretty much the same the world over. Not so with psychiatric disorders--the significance of which varies from culture to

culture. I suspect there are still individuals (as there were in World War II) who are regarded as ministers in their home towns in the South, who in the service are diagnosed as hallucinating schizophrenics. The hysteric in the Sudan may be regarded as bewitched (as some were in the early days of the United States) and a fit subject for the witch doctor rather than the psychiatrist.

Of greater importance and more immediate concern is the problem of threading one's way through the confusion of conflicting reports regarding the efficiency of one or another drug, of behavioral modification, of repressive therapy, of expressive therapy, reality therapy, of nondirective therapy, of directive therapy, of psychoanalytic therapy, of shock therapy, milieu therapy, etc.

The variety of treatments that different psychiatrists employ for the same type of psychiatric illness suggests the possibility that their decisions are in part based on their own biases and preferences rather than on the particular disorder from which the patient is suffering. Another possibility is that treatments which are considered more or less specific for certain disorders are in fact not specific.

For example: Patient "A" is depressed. An antidepressant drug is prescribed and the patient improves. The physician prescribing the drug may be convinced that the drug has a specific action on depression from the psychiatric literature and from the advertisements he reads in the scientific journals. Another example: Patient "B" is depressed. Uncovering psychotherapy is advised and administered with the physician's conviction that there is an underlying cause for the depression which when revealed and dealt with, will lead to improvement.

In each instance when improvement does occur, the physician is inclined to attribute it to what he did, i.e., giving a certain kind of medicine, or a certain kind of psychotherapy. However when doctors have been observed while treating patients, it seems that what they report they do differs a good deal from what in fact they do do. In administering drugs, the powerful effect of the authority and trust with which he is endowed and the expectancy of help that the patient has in going to him in the first place, play extremely important roles which will be readily acknowledged, but minimized or forgotten when the virtues of the drug are being extolled. In administering the psychotherapy, non-directive as it may be, great significance will be attached

to well-timed remarks and interpretations while frustrating silences, subtle encouragements, and the fact that this particular patient was selected for treatment rather than some other patient, will receive little credit. The aura of the sessions which are not interrupted except for emergencies and the sympathetic understanding manner in which all attention is focused on the patient, tend to be forgotten.

The important question is, are the results of the different treatment methods the same. Also, are there any specific indications for one kind of treatment as opposed to some others.

In evaluating the results of treatment, different measures are frequently employed and even when the same measures are used by different investigators, the measures may not be reliable. One cannot rely on just change in symptoms since treatment may relieve a patient of a phobia but disrupt a marriage or be complicated later by the development of a peptic ulcer. Or, a patient may overcome sexual frigidity but develop severe hypertension in its place.

Setting a goal of treatment, therefore, implies an awareness of the complications, the symptom substitutions, and the dependence or independence it carries with it.

While patients will generally go along with the treatment the physician recommends or undertakes, they will somehow use it to suit their own purposes and do a lot more directing and pursuing their own secret goals than the psychiatrist suspects. Patients will even have their own secret time tables for treatment which are difficult to change even when they are revealed.

In making rounds on a psychiatric ward, I've often asked patients how long they thought they'd need to stay in the hospital, and I've been struck by the specific notions so many of them had. Some would say a week, some a month, some six months. Some came to the hospital in the first place to get away from the burdens and stresses of their homes, some for the rest or respite from responsibilities. Some came because they were frightened, others because the rest of the family couldn't tolerate them any longer. Some came because they were dissatisfied with themselves, some for sympathy, understanding and protection, and some to try to understand. I don't mean that they'd tell you their motivations in so many words; they'd come with the symptoms that were necessary to get them admitted. While they are by

no means typical, many of the Veterans Administration's best customers admit very frankly that anytime they want to come back in the hospital, they come to the admitting office and say they are afraid they're going to kill themselves.

One phenomenon that has interested me is that patients (and their families) will often report more improvement from treatment than the doctor is willing to say took place. Doctors tend to be much more conservative in their estimates of change. They also tend to be more pessimistic about what will happen to patients who refuse treatment or discontinue than is justified.

The question of goals of treatment comes up most often with patients who are admitted to the hospital with a schizophrenic reaction. The usual objective of treatment is "to patch up the hole in the patient's defenses that has permitted unconscious material to erupt." Treatment is described as suppressive; one or another phenothiazine is administered to control the hallucinations and delusions; discussions are focused on the here and now and kept reality oriented. Uncovering tends to be strictly avoided. Sometimes it's difficult to determine if the goal is to get the patient to ignore his crazy thoughts and to get him to behave in an acceptable manner so that he can be discharged from the hospital to get a job or return to school, still crazy, but in what is euphemistically called a "social remission," or whether the goal is to cure him of his psychosis. Sometimes I get the impression it is left to the patient with either result being acceptable. Careful histories are taken of the patient's life and development so that the "cause" of the patient's illness can be determined and the blame for his illness properly placed. Then the doctor or nurse attempts to establish a relationship with the patient that is designed to manifest interest, consistency, encouragement, and sympathetic understanding. These are the ingredients which will enable the shattered ego to heal and strengthen. Unfortunately there isn't enough sympathy and understanding available to provide it to all patients, so just a few who are able to somehow stimulate it in the staff get it. These often are those patients who are not quite as ill as the others.

Let me give an example: J. D. is a 21-year-old, well built, nice looking young man whose family was highly respected and considered one of the leading families of the town in which they lived. He was attending college when he developed a paranoid schizophrenic reaction in which homosexual delusions and ideas of reference were quite prominent.

He complained that he had been dominated by his father and insisted that he wanted nothing to do with his family. He didn't want them to know where he was, didn't want them interfering in his treatment or giving him any help.

With the interested help of his doctor and medication, he gradually improved. Although still somewhat confused in his thinking, with ideas of reference and a tendency to misinterpret other people's actions and remarks, he was able to leave the hospital and get a job in a gas station. His doctor was continually torn between trying to help him see that he was projecting his own homosexual wishes onto others and making vigorous efforts to deny his own wish to be taken care of, and just being sympathetic and encouraging. His doctor was aware of technics of direct analysis that were used by Rosen, of the psychoanalytic psychotherapy that Frieda Fromm Reichman and others had employed in the treatment of schizophrenics, and of family therapy advocated by others.

He was faced with the danger of aggravating the patient's psychosis if he attempted to deal with the underlying dynamic factors and the prospect of a very limited adjustment and disabling exacerbations of the patient's psychosis if he did not. In this case, it was interesting to observe the patient's reaction. He regarded his doctor as a good, interested and understanding parental figure, and went along with his suggestions. But he also kept pressing him for explanations of what he called his blackouts which were brief losses of contact with reality that occurred when paranoid obsessions broke through mostly when talking with someone in social or work situations. At times he would express the wish to do more than just pump gas in the gas station and would consider the possibility of returning to his family.

Opinions were divided on what the goal should be in this case as they were on the availability of help if a more ambitious one were to be pursued, and as they were about the prognosis in either case.

The case of Mrs. M. is another example. She was a 60-year-old woman who was admitted to the hospital because of a depression. She had gotten to the point where she spent most of her time in bed, had stopped visiting friends or having them visit her, and was withdrawing more and more from life. She improved rapidly in the hospital on relatively small doses of antidepressant medication and was able to go home after about 10 days. Her husband who had been very

successful in the entertainment industry had had a personal analysis years ago. He was quite sophisticated and hoped that his wife could develop a little more understanding and psychologic sophistication. So following her discharge, I continued to see her and since she seemed to be an intelligent woman with a history of great involvement in community affairs and had gone on the Civil Rights March in Alabama, I thought I might help her understand herself a little more than she did, and secondarily understand others too. I might say that although she was out of the hospital, she was still somewhat depressed and she had asked to continue treatment as an outpatient.

I started out reviewing her entire life including the history of her marriage. She had had two previous depressions for which she did not have to be hospitalized. I might say that in this case she practically forced her way into the hospital.

To make a long story short, the more we looked at what had gone on before, the more anxious she seemed to become. I finally had sense enough to ask her about her previous treatment. I learned that she had not "talked" about anything to the two psychiatrists who had treated her in the past, and that in each instance she recovered after being given medication.

So I gave her medication (nortryptalline) and she promptly got well. Quite frankly, I believe she would have responded to anything that had been prescribed and the nortryptalline had little to do with it.

Another example is Mrs. W., a 40-year-old woman who came in seeking analysis. It had been recommended for her by some of her "arty" sophisticated friends who knew she was having some kind of emotional difficulty and urged her to eliminate her psychologic blocks. She complained of being anxious, conflicted, and unhappy. She was married to a building contractor who was fairly successful but not very exciting. She had two children and seemed not to be getting the satisfaction from life that some of her less inhibited friends seemed to be enjoying. After several visits it became clear that the reason she was seeking analysis was to be able to continue an extramarital affair in which she was involved without feeling guilty. She quickly realized that what she had to do was stop the affair which she did and promptly felt better and has remained well ever since.

Without relating any specific case history, I'd like to just ask what about the goals of treatment of the alcoholic? Usually it is to get rid of them by sending them to Alcoholics Anonymous.

What about the severe character disorders and borderline conditions that we are seeing with increasing frequency in the teenagers who are trying to find life solution in drugs, or pot, or LSD?

Ideally the goal of treatment should be based on seven factors:

1. Understanding of the patient and not just the psychodynamic and unconscious factors that are operating in the patient's illness.

2. What the patient wishes from treatment; every patient with a hernia does not seek surgery. Some patients just want to be happier; most want relief from annoying symptoms; some want to understand themselves better; some recognize a need for increasing their tolerance for frustration and their self-control; and others may wish to change their personalities.

3. The nature and severity of the patient's illness.

4. The age of the patient.

5. Intelligence and physical conditions and psychologic mindedness and cultural background.

6. Patient's life situation.

7. Unfortunately such factors as the patient's financial status and the availability of competent and interested help also need to be considered.

As I promised at the onset, I have said nothing new. My main reasons for this presentation are to:

1. Re-emphasize the difficulties in evaluating the results of psychiatric treatment, and as a corollary, the difficulties in comparing the results of different treatment.

2. Mental and emotional illnesses are inextricably involved with underlying personality disorders, and in establishing goals of treatment for one, it is necessary

to consider the other, especially if one is concerned with long-term results as well as short-term results.

3. Because of the tendency to place a higher value on psychotherapy that is designed to help a patient understand his emotional disorder rather than a supportive or repressive therapy that is concerned with symptomatic relief, uncovering or insight-producing psychotherapy may be employed when it is in fact not indicated or even harmful. On the other hand, purely supportive or repressive technics are utilized for limited goals when more far reaching goals would be in the patient's best interest. At times the initial utilization of one particular form of treatment may seriously interfere with the ability to use another later when its use becomes clearly indicated.

The automatic and repeated use of shock treatment for patients with neurotic depressions at times results in such passivity and dependence that psychotherapy becomes impossible. The continued use of drugs to relieve anxiety too often these days results in a serious habituation that is often impossible to relieve. On the other hand, there are patients whose fragile egos have been overwhelmed by psychoanalytic approaches that resulted in a chaotic or a psychotic thinking disorder and rejection of any kind of somatic approach.

There is much we need to learn about indications for the various types of treatment--an attitude that varies considerably from the often repeated advice that "You've got to believe in one method to be an effective therapist." This is painfully remindful of the witch doctor. Therapists are too often guilty of applying preconceived ideas of psychodynamic causality to patients before understanding the unique background of the individual patient.

In recent years we've seen a turning of attention to the elements in society and the patient's culture that contribute to mental ill-health (poverty, discrimination, exploitation). This new approach, called social psychiatry, really got its start in the military services where the quality of leadership, esprit de corps, proper training, fair rewards and punishments, promise of relief from stress, buddy system of replacement, etc., were recognized as crucial in maintaining individual and group effectiveness. Social psychiatry implies not only paying attention to the elements in society that contribute to a patient's illness, but also to

those elements that involve the patient's responsibility to society as exemplified in the military "society."

I expect civilian psychiatry will sooner or later follow the military in the second element of social psychiatry, that is, in shifting the focus from the individual's needs to the needs of society. The individual's effectiveness in fulfilling his responsibility to the needs of the society will then become the goal of treatment--not his happiness, nor even his safety especially as we move more and more to a strong powerful centralized government and as the clear distinctions between the states of war and peace become less and less discernable.

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## BEHAVIOR THERAPY IN 1968

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### INTRODUCTION

The practice of behavior modification predates the formal introduction of the term "conditioning" by countless centuries. Throughout the years, legend and literature have yielded a variety of colorful--if not always scientifically sound--references to behavior modification in one form or another. Since it becomes virtually impossible for any field of human endeavor not to be concerned with the modification of behavior at some stage, this is hardly surprising. Such modification may be directed towards the more mundane purposes of everyday living--such as child rearing or social intercourse--or the intent may be explicitly therapeutic.

As far as therapy is concerned, we take the view that, at least in part, all functional disorders are disorders of behavior. Only through some aspect of an individual's behavior--either his own report of internal processes or his own actions as observed by others, or by some combination of these--can the need for therapeutic change become apparent. By the same token, every aspect of a person's internal psychic life and every aspect of his interpersonal life achieves meaning to society only in terms of some form of behavior. Behavior modification is thus an integral part of every aspect of the life styles of all individuals.

While clinicians of most persuasions would probably accept this point of view as a starting-off position, many would claim that it is not sufficient. They would contend that it is not possible to understand functional disorders in terms of behavior or symptoms alone and that it is essential to formulate treatment strategy in terms of those psychodynamic or unconscious principles which, so they believe, reflect the ultimate realities of the situation. The behavior therapist disputes this contending that such hypothetical constructs are usually unnecessary and often an impractical and time-consuming luxury.

Behavior therapy, and with it the emergence of the behavioral clinician, is unique in several respects. Although firmly established among the schools of psychotherapy, behavior therapy did not achieve this position through the expansion of a small but energetic core of orthodox practitioners rigidly subscribing to similar convictions and practicing identical methods of treatment. Behavior therapy is not a movement and, in fact, those who utilize the principles of conditioning and learning in their approach to clinical problems differ in ranges of interest, techniques employed, and even fundamental conceptions of the learning process. What all behavior therapists have in common is a dedication to the objective, questioning approach of the behavioral scientist together with a special preference for methods derived from theories of learning and the principles of reinforcement.

Focusing upon behavior rather than upon intrinsically undemonstrable constructs, the concern is with the adaptation of knowledge culled from the laboratory to the real life situation. So far, the emphasis has been upon S-R learning theory models in which the principles of learning and conditioning are applied in systematic fashion to the elimination of undesired behaviors and the molding of desired patterns of behavior. It is hoped that eventually other models will generate techniques which also lend themselves to experimental control.

In the main, two kinds of conditioning or learning models are employed. The first is based upon classical or Pavlovian conditioning, an Aristotelian association by contiguity, or respondent learning. The second stems from the work of Skinner and is known as operant or instrumental conditioning in which the reinforcement or reward is contingent upon the organism making the desired response or not making the undesired response. In this manner, it is possible to shape the subject's behavior so as to increase the probability of the desired behavior pattern being evoked and to reduce the probability of the undesired responses occurring. By a process of generalization, response patterns learned in one situation can then be extended to situations containing different stimulus possibilities.

#### HISTORICAL OVERVIEW

For thousands of years, reports have been circulated of deliberate attempts to shape or mold behavior for

therapeutic purposes and otherwise. From all accounts, despite a lack of systematic knowledge of the principles involved, these methods seem to have achieved their primary purpose. Even in prescientific days, aversion "therapy" was a favorite method of controlling undesirable behaviors such as smoking, stealing, excessive drinking, religious heresy, and other social ills of the time. More recently--but still prior to the advent of "conditioning" as a scientific term--behavioral principles have been applied in a variety of more obviously therapeutic situations, often in remarkably ingenious ways. For example, in the early 1800's, Johan Christian Reil treated completely stuporous depressed patients by infecting them with scabies in order to induce the motor activity of scratching and thus provide a first step towards active involvement with their external environment.

The systematic application of the principles of learning and the study of the laws governing higher nervous activity did not really begin until the arrival of Sechenov and, later, Pavlov upon the professional scene. In the decades prior to Pavlov's investigations, many descriptions of the essential phenomena of conditioning were reported in the scientific literature of the day, but these were invariably post hoc descriptions rather than exploration of the means whereby conditioned reflexes could be induced and subjected to experimental control. It was left to Pavlov and his associates to embark upon a program of study of conditioning as an experimental science. Similarly, prior to the efforts of Sechenov (and Sherrington), inhibition, regarded as essentially an absence of excitation and not as a positive process in its own right, was--for the most part--a matter for philosophic speculation, sporadic investigation, and observation rather than systematic experimental study. Sechenov was undoubtedly the major scientific influence upon Pavlov, and this is apparent throughout the writings of both.

In assessing the contributions of Sechenov and Pavlov, it should be stressed that, like their confreres in the West, responsible scientists in the Soviet Union no longer accept Pavlovian "neurologizing" uncritically. Pavlovian notions are best regarded as working inferences drawn from behavioral facts, investigated and explored with modern technics, interpreted in the light of modern neurophysiology, and discarding or modifying concepts as the data dictate. What is really of importance is not so much the quasi-neurological system which Pavlov established as his methodology but his dedication to the systematic and objective study of behavior and his willingness to adapt theory to conform with facts.

Modern behavior therapy models itself upon these latter principles of Pavlov rather than upon a slavish adherence to his technics. Therein lies the strength of behavior therapy.

Pavlov relied extensively upon association by contiguity, as in his famous conditioned salivation experiments, in which the food was primarily a stimulus for salivation. But in instrumental conditioning the food becomes a reinforcer. It is out of this deceptively simple innovation that the whole school of operant conditioning and its vast range of ingenious applications arose. These developments are largely American stemming from the pioneering work of Skinner and his many gifted students. To these names must be added those of Hull, Guthrie, and a small number of other stimulus-response (S-R) learning theorists who succeeded in integrating into one or more systems the basic concepts of both respondent and operant conditioning.

From such historical and scientific beginnings arose much of what is now known as modern behavior therapy. Behavior therapy in 1968, while still evolving and in a state of change, is much more sophisticated than that which was practiced as recently as a decade ago. It is to these developments that we now direct our attention.

#### MODERN BEHAVIOR THERAPY

In its present form, behavior therapy requires a wide variety of skills ranging from the knowledge of physiology, learning theory, and scientific methodology of the behavioral scientist to the sensitivity and clinical judgment of the practitioner. Thus, modern behavior therapy, as we view it, may be regarded as the application of experimentally validated principles based upon S-R concepts of learning within a framework which takes into consideration both the biophysical properties of the organism and the complexities of the environment in which it lives.

If the concepts and practice of behavior therapy now encompass a diversity of technics and training, this was much less true when Lazarus and Eysenck independently introduced the term "behavior therapy" in 1958 and 1959 respectively. In those days, many behavior therapists (not Lazarus) were rigid individuals who tended to focus upon the treatment of one deviant behavior by a highly limited number of technics and all too often at the expense of the individual. Gradually, with the advent of the total behavior

therapist and the behavioral clinician, the concepts of behavioral management came into being and, with it, the advent of broad spectrum behavior therapy--a topic to which we will return shortly.

As an example of this evolutionary process at work, we will review briefly the history of the treatment of alcoholism by aversive conditioning over the past three or four decades. Between World Wars I and II, alcoholism--then as now--cost this country untold psychologic and economic hardships. It was during this era that overworked physicians and practicing clinicians, confronted with the pressing problems of alcoholism but having little time to devote to them, arrived at the notion of aversive conditioning by means of apomorphine. They probably read about Pavlov but had little direct contact with his writings (we are, of course, engaging in simplification and presenting a little bit of a caricature in order to make the point briefly in the limited space that is available). In particular, they neglected to concern themselves with procedural details arising from the application of known principles of conditioning. For example, had they made themselves familiar with the published hazards of backward conditioning (in which the UCS precedes the CS in time) they would not have waited until their patients actually felt nauseous before presenting them with the bottle of alcohol. And, had they read of the adverse effects upon conditioning of centrally depressant agents, they would not have given their patients sedatives to help them over the traumatic conditioning process which was to come.

No wonder then that effective aversions to alcohol were rarely established, and aversive conditioning fell into disrepute and disuse not being revived until the following decade when the behavioral scientists came into their own. Realizing that apomorphine could never meet the required needs for precise stimulus control, these experts on conditioning, learning, and experimental procedures employed electric shock as aversive stimuli and set up firmly delineated controls under theoretically optimum conditions. But, to their chagrin, even in those few cases in which the technic was successful, all that was usually achieved was that, instead of very sick individuals who drank too much, they now had as patients very sick people who didn't drink too much.

It is at this stage that the contemporary behavioral clinician emerged on the scene. It was realized that it is

not always desirable to treat merely the presenting complaint, but a variety of technics may need to be applied to many facets of the total problem. Some of the problems present may be not recognized or may be denied or glossed over by the patient. The total behavioral therapist, even when he is employing traditional and conventional conditioning technics, recognizes the inadequacy of focusing upon a technic and/or a symptom. Both have to be viewed within the context of overall behavioral management. Patients with complex interpersonal problems cannot be expected to lose them merely because a particular malfunction has been eliminated. In this context we concur with Goldiamond, Dyrud, and Miller's suggestion that "symptom" can be a valid behavioral term without any implication of underlying "causes" in the psychodynamic sense. As Goldiamond et al. point out, when one goes to a dermatologist who states that the skin rash is symptomatic of a blood disturbance, what this means behaviorally is that his primary treatment will be focused not on the presenting symptom, but on something else, namely the blood disturbance. When we talk of symptomatic behavior, we are really implying that, rather than reacting to the presenting symptom alone, we may need to treat some other aspects of behavior as well. Once the behavioral deficits are overcome, the symptomatic behavior will in all likelihood decrease.

It may be of interest to note that, whereas this evolution took some three or four decades with respect to the behavior therapy of alcoholism, a similar evolution in the behavioral treatment of sexual disorders required some half a decade at the most. Whereas the behavioral technics for the treatment of sexual disorders in the early 1960's consisted chiefly of naive symptom-directed aversive conditioning procedures, by the late 1960's the "total behavioral approach" was being applied in this area also.

It is beyond the scope of the present brief commentary to provide a comprehensive presentation, or even review, of the many technics available to the behavioral clinician. Such information is readily available elsewhere. The important fact to note is that a behavioral clinician is not just a therapist who happens to employ behavior therapy technics. The use of a technic alone can be quite a mechanical matter requiring no particular intellectual orientation. What distinguishes the behavior therapist from the general clinician who happens to be using a few of these technics is that, while--like all therapists--moved by feelings of warmth and compassion to help his patients, he also thinks of them in S-R terms in which neurophysiological and other mechanisms

are engaged in complex and "dynamic" interrelationships with the environment. Viewing therapy as the process of changing these relationships, he bases his strategy upon a knowledge of experimentally established principles of learning, individual differences, and contemporary physiology. He operates in this way regardless of the nature of the stimulus, whether it be exogenous or endogenous, simple or complex, a bodily sensation or a mental image, and regardless of the modality of the response--motor, autonomic, imaginal, or any combination of these.

While recognizing the importance of physiologic and biochemical variables, many behavior therapists tend to stress the behavioral rather than the medical model. This has inevitably resulted in a different set of goals and a different terminology. Thus, rather than employ concepts such as "cure," the behavior therapist thinks in terms of changing frequencies of emitted or respondent behavior and of functional relationships between environmental stimuli and organismic responses. Nowhere is the difference between the behaviorally oriented therapist and the traditional psychotherapist more evident than in their respective approaches to the issue of symptom substitution. It is not so much that the more sophisticated behavior therapist flatly denies that the isolated treatment of one symptom could result in the emergence of another (a matter to be resolved by research rather than epithet from either side) but that, if it exists, the behavior therapist attempts to explain this phenomenon in learning theory terms subject to controlled investigation, and hence scientific verification, rather than by invoking intrinsically untestable psychodynamic inferences.

#### SYSTEMATIC DESENSITIZATION

There are many technics of behavior therapy which could be discussed at length ranging from the more physiologically oriented procedures of Pavlovian conditioning to the various methods of role playing, modeling, and social learning. Any attempt to provide such a discussion here would probably end up as a superficial classification of little or no practical value to the reader. It was therefore decided to illustrate the scope of behavior therapy by reference to one technic in detail, that of systematic desensitization as developed by Wolpe and subsequently modified by one of us.

Arising out of his replications and extensions of Masserman's well known studies of experimental neuroses in

cats, Wolpe (2,3) developed his now famous principle of reciprocal inhibition: if a response, inhibitory of anxiety, can be made to occur in the presence of anxiety-evoking stimuli, it will weaken the bond between these stimuli and the anxiety. Many individuals have developed modifications of Wolpe's basic technic, and the relative efficacies of these variations are in the process of controlled investigation. Wolpe's technic for relaxation, modified from that of Edmund Jacobson (1), usually requires some six to ten sessions of complicated directions to develop deep relaxation. The following procedure, specially developed for use with neurotic patients, produces deep relaxation in one session. The patient, in a prone position, is given the following directions:

"Stretch your legs as far as you can  
. . . turn your toes in . . . feel the tension in all the muscles of your toes . . . the muscles of your feet . . . the muscles of your calves . . . the muscles of your thighs . . . hold it as tight as you can . . . hold it (15 seconds) . . . now let go. Let go and close your eyes . . . feel the relaxation going from the muscles of your toes . . . to the muscles of your feet . . . to the muscles of your calves . . . to the muscles of your thighs . . . feel wonderfully relaxed, beautifully relaxed, deeply relaxed.

Stretch your arms as far forward as you can . . . make a fist . . . feel the tension in the muscles of your hands . . . the muscles of your forearms . . . the muscles of your upper arms, hold it as tight as you can . . . hold it (15 seconds) . . . now let go. Let go . . . close your eyes. Feel the relaxation going from the muscles of your fingertips . . . to the muscles of your fingers . . . to the muscles of your hands . . . to the muscles of your forearms . . . to the muscles of your upper arms . . . feel wonderfully relaxed, beautifully relaxed, deeply relaxed.

Stretch the muscles of your stomach . . . the muscles of your chest . . . the muscles of your back . . . the muscles of your shoulder blades . . . the muscles at the nape of your neck. Stretch it as hard as you can . . . hold it (15 seconds) . . . now let go. Let go . . .

close your eyes. Feel the relaxation going from all the muscles of your stomach, to all the muscles of your shoulder blades, to all the muscles at the nape of your neck . . . feel wonderfully relaxed, beautifully relaxed, deeply relaxed.

Tighten your face as hard as you can. Feel the tension in all the muscles of your forehead . . . the small muscles around your mouth . . . the muscles around your mouth . . . the muscles of your cheeks, the muscles of your chin . . . the muscles of your throat . . . hold it (15 seconds) now let go. Let go . . . close your eyes. Feel the relaxation going from all the muscles of your forehead, to the small muscles around your eyes, to all the muscles around your mouth, to all the muscles of your cheeks and your chin, to all the muscles of your throat . . . feel wonderfully relaxed, beautifully relaxed, deeply relaxed."

The patient is then asked to visualize a scene for about 20 seconds in which he feels very calm and relaxed and which gives him a feeling of well-being. ("Keep seeing that scene and enjoy it; feel calm . . . feel relaxed . . . feel wonderfully well . . . just relax as you see yourself in that scene.") The purpose of this scene is to prevent any unpleasant thoughts from intruding and disrupting the patient's relaxed state.

The patient is then asked to raise his finger if he feels calm and relaxed. Should he find that any particular part of his body is still not relaxed he is told to focus upon that area. For example, if he has tension in his stomach, he is given the following directions: "Visualize yourself in the sun (or in the bathtub if he prefers). Feel the warmth of the sun's rays on your stomach, feel the muscles of your stomach relaxing as the sun warms the muscles, feel the muscles relaxing slowly . . . slowly . . . gently . . . feel as if all the tensions have poured out of the muscles of your stomach and relax. Relax . . . feel wonderfully well . . . wonderfully well." (Similar procedures are followed for other parts of the body.)

The patient is encouraged to practice this procedure several times per day at home.

Prior to the relaxation procedure, the hierarchies to be presented are discussed with the patient as part of the

collaborative process between therapist and patient. When the patient is very deeply relaxed, the scene evoking the least anxiety is presented first as suggested by Wolpe. This anxiety-provoking scene is alternated with the original scene selected by the patient as being especially relaxing and pleasant for him. This procedure is repeated until the patient signals that there is no anxiety for that particular scene. Wolpe's technic of systematic desensitization is further modified as follows.

The patient is directed to remain as calm and relaxed as he can and see himself involved in the scene from which he had just been desensitized. For example, if the patient had been desensitized to walking to the elevator and going down the elevator, he is then told to "see yourself walking to the elevator and going down the elevator, remaining calm and relaxed." This is repeated several times until the patient reports that he can see himself doing this with complete ease, feeling calm and relaxed. In this manner, Wolpe's systematic desensitization is carried a step further to a stage which might be termed "role conditioning." Patients report that this additional step in the desensitization procedure enables them to make the transition from the imaginary scene to the real life situation with greater ease and confidence. It is as if, having experienced the situation prior to actually doing it, they find that they have no fear or difficulty in carrying it through in the real life situation.

#### GENERAL OVERVIEW OF BEHAVIOR THERAPY

From the foregoing, it is apparent that the behavioristic approach to psychotherapy emphasizes a noninterpretative approach to the patient. The basic data are what the patient says, does, or reports about himself, what other people report about the patient, and how he is observed to react in specific laboratory or natural situations. It is important that the language used to report such behavior be factual and precise and that the circularity of employing the same construct language, both to report the events and then to explain them, be avoided.

In contrast with the strategies of certain psychodynamic therapists, it is not believed that "undesirable" behavior will somehow correct itself if additional states such as the attainment of "insight" and "working through" are brought about. The behavior therapist believes that

usually the best way to alter an abnormal behavior pattern is by paying specific attention to the modification of behavior. Thus, for the behavior therapist, to a large extent (but not exclusively) behavior therapy involves the realignment, learning, and unlearning of response patterns. Adaptive responses, i.e., responses which are of value to the patient, must be reinforced or strengthened and maladaptive responses eliminated. This latter process may be accomplished either by reinforcing an already existing (or deliberately introduced) incompatible response or by weakening the maladaptive response by some technic of extinction; sometimes a combination of tactics is necessary. Since there is ample evidence to suggest that the strength of a response is a positive function of the number of reinforcements, it is usually most efficient to focus upon the reinforcing of adaptive responses whenever this is feasible.

There is little doubt that such behavior shaping technics can be extremely powerful as those who desire to modify behavior for their own questionable purposes know only too well. Fortunately, such principles can be equally potent in the resistance of such tactics, a policy which is only beginning to be recognized. Individuals who have been carefully trained in the elements of behavior modification and the various methods of behavioral self-control are well prepared for resistance to the blandishments of the "brainwashers" should the need arise.

Sadly enough, one of the places where these principles are sometimes unwittingly used to the detriment of the patient is the large state mental hospital. Stemming from a regrettable tradition of staff shortages, mediocre personnel, poor facilities, and a wish to retain the routine of the firmly entrenched status quo (in which everyone, staff and patient alike, knows his immutable role), the term "continued treatment" becomes a euphemism for "change nothing." In such a milieu of sensory limitation, the patient is reinforced only for passivity, routine and dependency, and deviation from this norm is punished. The behaviors which get reinforced are largely those which make the patient "good" from the staff point of view. At the same time, antisocial activities such as stealing, cheating, and sexual offenses are reinforced by the approval of the patient's peers. The outcome of such a combination of reinforcements may be seen in the unfortunate mixture of passivity and degeneration to be encountered in the "back wards" of certain state hospitals. (Incidentally, a partly similar argument could be applied to many of our prisons and so-called reformatories).

In recent years behavior modification has produced dramatic changes in the behavioral repertoires of deteriorated patients previously regarded as beyond all change. Such behavior modification will not effect a cure, especially if actual central nervous system damage or an underlying psychosis is present. But, if those components of a patient's behavior that are amenable to such modification are indeed modified, then the professional staff are in a better position to focus their attentions upon those disease components of the patient's behavior which are not the product of his institutionalization.

To modify behavior it is necessary to know something about the past learning patterns of the individual concerned together with some knowledge of those past and current stimuli which specifically elicited the behavior in question. This process of behavioral assessment is analogous to the diagnostic interview and testing of the psychodynamic psychotherapist and is an essential prerequisite to the formulation of a plan for behavioral change. The well-trained behavioral clinician may devote several sessions to this preliminary phase before he considers himself in a position to attempt behavioral change. Very often it is not the presenting complaint which is the only, or even the most important, behavior to change.

The "broad spectrum" behavioral approach thus embraces assessment and modification. The elimination of certain maladaptive behaviors (such as drinking or petty stealing) may mean that new, and more constructive, reinforcements or tension-reducing responses have to be developed. The environment itself may need to be modified in order to alter the probabilities of stimulus exposure. If this is not possible, the patient may have to be taught new behavioral methods of coping with such stimuli. Or, if the stimuli originate largely from within, as in the case of certain obsessional thinking, the patient will need to be taught behavioral methods of self-control in order to cope with his internal source of stimulation.

Thus for the behavioral therapist, the policy is one of total endeavor embracing appraisal and description, the exchange of information between the patient, therapist, and all those who deal with the patient, and--finally--the formulation of a strategy of behavioral modification which is itself under continual review as the sessions progress. Of extreme importance in many instances is that those who are directly involved with the patient on a day-to-day basis

(such as attendants, nurses, teachers, and parents) are taught how to apply the principles of behavior modification themselves in all their contacts with the patient. Behavior therapy is not something to be confined to hourly sessions in a therapist's office a couple of times a week.

### CONCLUSIONS

Although behavior modification is no passing fancy, it should certainly not be regarded as a panacea. Much research remains, many issues are unresolved, and the practical and lasting values of certain technics await demonstration. There are many learning theories competing for supremacy, and the road from the laboratory to the clinic is still a long one. New concepts will undoubtedly arise and new problems will present themselves. For example, despite his scientific training, the behavior therapist is not an automaton delivering stimuli to his patient in a totally mechanistic and impersonal manner; he, too, is a changing and responding organism. Just as the patient's behavior is a function of that of the therapist as a reinforcing machine, so the manner in which the therapist responds is, in part, a function of what the patient does in this complex interpersonal patient-therapist situation. But it needs to be stressed that these interactional processes can be studied in behavioral terms without resorting to phenomenological constructs such as "the unconscious."

Problems also arise at the professional level. On the one hand, a small number of experimental psychologists act as if a knowledge of S-R learning theory and scientific method is sufficient in itself for a successful plunge into the clinical situation; on the other hand, certain clinicians attempt, with equal brashness, to apply these technics without sufficient knowledge of the learning theory involved. Centers for the training of responsible, mature, and sophisticated behavioral clinicians are necessary and a variety of open forums for the communication and exchange of practical, professional, and research issues are required.

Not least among the problems facing the behavior therapist is that of overcoming the resistance of the traditional clinician. Such resistance stems in part from a lack of familiarity with the language and concepts of the behavioral clinician--such unfamiliarity makes the technics of behavior therapy seem more complex and difficult to use than they actually are. Also, the conventional therapist

may loathe to abandon technics and models in which he has invested many years of training and from which he derives his sources of income, identification, and even emotional satisfaction. Sometimes the resistance takes the form of a prejudice which is impervious to reason, the unsubstantiated allegation that behavior therapy is effective only for monosymptomatic cases being a case in point.

Several conclusions seem to emerge from this brief survey. Over and above all the problems already noted, there exists the fact that much more research and controlled clinical evidence with respect to the value of behavior therapy is needed if the claims to greater objectivity, effectiveness, scientific rigor, and teachability are to be substantiated. But, when all is said and done, its successes are impressive and its limitations are at least matched by those of any other system of therapy yet derived. No form of therapy has so far shown itself to be the much needed panacea, and the gap between the supply of mental health workers and the demand appears to be growing wider. Under these circumstances, it is important for traditional and behavioral therapists alike to retain open minds and explore any therapeutic system of promise.

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THERAPISTS' AWARENESS OF HOW  
GROUP THERAPY PATIENTS PERCEIVE THEM

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The therapist may often have occasion to ask himself, "How is my patient or group seeing me?" As treatment progresses and such factors as transference, involvement, group cohesion, increasing knowledge of the patient, and increasing exposure of the therapist as a person enter into the ongoing relationship, answering this question may become increasingly difficult. Simultaneously, does the therapist's awareness of his patient's perception of him become increasingly inaccurate; or does a therapist's awareness of these perceptions increase as he learns to know his patient or group and his or their problems more intimately and with greater understanding?

Assuming these questions to be relevant to all forms of psychotherapeutic treatment, the group treatment program of the Department of Psychiatry, Wilford Hall USAF Hospital, was seen by the authors as an opportune setting in which to ask these questions empirically. We saw self-awareness and awareness of the treatment process as complemented by the therapist's awareness of how his patients were perceiving him. This led us to the question of how aware were group therapists of their group's perceptions of them as therapists. Further, we questioned what impact the group process, transference, involvement, increasing knowledge of the group members, increasing exposure of the therapist as a person, and other factors of continuing treatment might have upon the therapist's awareness of the group's perceptions. From these two basic questions--how aware were group therapists of their patients' perceptions of them, and how, if at all, did this awareness change during treatment--we formulated two basic hypotheses:

I. Group therapists are likely to be more aware of their group's perceptions of them than chance would allow.

II. Group therapists become more aware of their group's perceptions of them as treatment progresses.

Two of the therapy groups with membership composed of psychiatric inpatients were selected for inclusion in the research study. A scale, described later, was designed to tap group members' perceptions of their therapists. The scale was administered intermittently, throughout group treatment, to both members and co-therapists. The therapists were asked to complete the scale in a manner as to best reflect their group's combined perceptions of them as therapists. The group members' responses and therapists' responses were compared statistically, both for the four separate administrations and also through four subareas around which items in the scale clustered.

Other inquiries into perceptions of therapists by patients or clients and into the helping person's degree of awareness were more often restricted to the one-to-one rather than to the therapist-group relationship. While reviewing the literature, we examined studies that dealt with clients' reactions to initial interviews and the expected behavior of a potential therapist.

The evidence of the study by Thomas et al. (3) suggested that a potential helper's intensity of motivation to help a client was instrumental in organizing the client's pattern of behavioral expectations of the helper. The data suggested that two major decisions by the client in the initial interview were related to the client's conception of a helper's intensity of motivation to help. These decisions were (1) the client's willingness to continue the relationship, and (2) the client's willingness to be influenced by the relationship.

It was found in the study by Polansky and Kounin (2) that the way in which clients' needs and satisfactions were met in both problem-centered and relationship-centered areas determined what the client would expect of the interviewer in the future, and whether or not (and in what way) he wished to commit himself to the interviewer. The study also substantiated that for a client to be influenced by the interviewer, interest was necessary but not enough to influence a patient as to whether or not he wished to continue in treatment.

The present study, drawing from the worker-group relationship rather than from the one-to-one relationship

as in the preceding studies, introduced such factors as the group member's influence on each other's perceptions and the necessity that the therapist evaluate a combined group perception rather than that of a single patient or client. Finally, each therapist had to consider the effect of the presence of a co-therapist, including the member's comparisons of the two therapists and the miscability of the perceptions of the two therapists.

#### DESIGN AND METHODOLOGY

The experimental design set up to test the hypotheses, briefly outlined above, included the administration of a scale to two all-male psychotherapeutic treatment groups. The group members were drawn for treatment from each of three psychiatric inpatient wards. The groups were composed of five to eight patients selected by the following criteria: (1) Length of hospitalization, (2) Referral from the patient's physician, (3) Diagnosis - those patients who were unable to benefit from group therapy or whose presence in the group would interfere with the treatment potential of the group were not referred for group therapy. The final step in the selection of group members was an individual interview by the group therapists. This also initiated the preparation of the patient for involvement in the group. The characteristics of these groups were relatively heterogeneous: the age range was from 18 to 52; length of service ranged from 3 days to 19 1/2 years; rank ranged from Airman Basic to Major; finally group members had diagnoses including psychosis, neurosis, and character disorders. Some patients expected a return to Air Force duty, while others anticipated retirement or separation from the Air Force.

One group was a closed short-term treatment group which ran for five weeks meeting three times a week for a total of 16 treatment sessions. The second was an open-ended group with membership rotating as patients entered and left the hospital and continuing following the study. The second group met twice a week for a total of 16 treatment sessions during collection of the data. The average length of time for each patient in the group was about one month. The second group, in the judgment of the therapists, retained a fairly high level of cohesiveness and a moderate depth of involvement throughout its course, never regressing to the level of a newly-formed group, despite its changing membership.

The therapists were social workers assigned to the Psychiatric Inpatient Service. Each group had two male co-therapists and an observer who aided the therapists in objective review of the group sessions.

The scale (see Appendix) had 29 items requiring the respondent to mark on a continuum the degree to which they saw the particular therapist exhibiting a particular trait.

A ten-point subdividing scale was applied later in tabulation of the data. The items were distributed at random throughout the scale, and some items were presented negatively in order to compensate for any response set.

Included on the scale was an open-ended item asking for a verbal description of the therapist. This was included to obtain any consistent perception not noted in the 29 items.

The items in the scale were designed to measure perceptions of the therapists in four general areas. These were: therapist's effectiveness (T. E.), therapist-member relationship (R), direction and control (D. C.), and an area concerned with the way that members saw the therapists using various technics (T).

Therapist effectiveness (T. E.) was seen as the perceived ability or inability to aid the group or member to improve his psychosocial functioning and includes such items as "Hinders my getting better," "Is an effective therapist," "Is concerned with feelings," and "Helps group members get better." Therapist-member relationship (R) was seen as the area including a member's perceptions of his relationship with the group therapist and includes such items as "Rejects me," "I depend on him," and "Shows interest in me." The direction and control area (D. C.) was seen as the member's perceptions of the therapist's behavior in directing and controlling such aspects of group treatment as the process of the group or the level of feeling content and included such items as "Discourages participation," "Is the leader of the group," and "Over controls the group." Finally, the area of the perceived use of technics (T) was designed to tap the member's degree of perception of the therapist's use of technics and included such items as "Is concerned with facts," "Confronts me with my behavior," and "Helps me express feelings."

As a validity check, the items were submitted to a panel whose members were asked to place each item into one of the four categories. The panel, consisting of two resident psychiatrists, one social work technician, three social workers, and one clinical psychologist, judging independently of one another, concurred by majority with the authors' categorizations on 21 of the 24 items. The three disputed items were deleted from the tabulation.

The scale was administered to both members and therapists at the end of the first, seventh, twelfth, and sixteenth sessions. The sixteenth session marked the end of the closed group. Each member completed a scale, handed out and retained by the observer, on each of the co-therapists in his group. Each therapist completed the scale as he felt the group perceived him as a therapist in the group. Group members were assured that the results would be retained by the observer until the group terminated.

For each administration a mean response was tabulated for each group on each therapist item by item. These means comprised the group's measured perceptions of each therapist. The mean was then paired with the therapist's response which comprised the therapist's measured awareness to the same item in the same administration. A Pearson Product-Moment Correlation Coefficient (1) was calculated between groups' perceptions and therapists' measured awareness for each of the four administrations. The N used in the calculation was 84. In addition, in an effort to learn of areas of greater or lesser awareness, the correlations were calculated between group means and therapists' responses for each of the four sub-areas of perception into which the scale items clustered.

## RESULTS

Over the course of 16 sessions of group therapy and four administrations of the research scale, the correlations between the group members' perceptions of their therapists and the therapist's awareness of those perceptions were statistically significant at the .05 level during all but the second administration or seventh session. It was also found that the correlation was highest,  $r = .55$ , during the first administration, and following a low of  $1.18$  during the second administration, the correlation again became significant during the third administration,  $r = .28$ , and continued to increase through the final administration to  $r = .36$ .

When the data was subdivided into the four areas already described--technic, direction and control, relationship, and therapist's effectiveness--the following findings were made: The therapists were most aware of the groups' perception of technic, only initially aware of direction and control, and never found significantly aware in the areas of relationship and therapist's effectiveness. The high level of correlation between awareness and perception in the area of technic contributed substantially to securing the overall degree of correlation toward a higher level of significance. It was also noted that throughout therapy the patients' responses were consistently higher than the therapists' responses.

#### DISCUSSION

The degree of correlation between therapists' awareness and patients' perception for the combined data was fairly low in all four administrations. While ranging from a high in the first administration to a low in the second, it was found statistically significant at the .05 level in the first, third, and fourth administrations, lending tentative and conditional support to our first hypothesis that group therapists were more likely to reflect their group's perceptions of them than chance would allow. Because the correlation in the initial administration was the highest of the four, the second hypothesis, that group therapists became more aware of perceptions of them as treatment progressed, was not supported.

The development of the group process was thought to account, in part, for the changing degree of correlation. Initially, the multiple variables concomitant with cohesiveness and relationship among patients and between patients and therapists had little time to develop and, hence, little impact. At the time of the second administration, the correlation dropped significantly perhaps because need for trust and cohesiveness was manifested but remained limited. As treatment continued and the group process developed with cohesion, trust and strong group feeling, and familiarity between patients and therapists increased, the correlation became significant and remained so in the fourth and final administration.

The correlations between therapist's awareness and patients' perceptions in the four separate areas, technic, direction and control, relationship, and therapist's effectiveness, were believed to have a primary influence on the

overall correlations and might account for the overall correlations disclosing significance in three of the administrations.

The correlation was highest on questions dealing with the subarea of technics. This may be partly because the meaning of these questions was more clearly understood by the patients. The very high correlation at the final administration (.98) accounted for the overall correlation being significant and tended to "skew" the results as this is the only subarea that was significant in the fourth administration. The increasing correlation might be accounted for by the developing group process, numerous distorting factors being worked through, and the patients learning more about what the therapist's role included as far as use of technics. That is, patients learned what technics were and how the therapists used them; hence, allowing the therapists to more easily gauge how the patients were perceiving them.

The correlation on questions measuring direction and control was fairly high initially, dropped markedly at the second administration, and continued to decline as treatment progressed. The therapist's role during the initial sessions was more directive, hence, his role was more clearly perceived by both himself and the group. However, as treatment progressed, the therapist's role became less clearly defined as the therapist's direction of the group became less active. He saw himself giving up directing and controlling the group while the patients perhaps continued to perceive the therapist as maintaining the more directive and defining role.

The correlations on relationship and therapist's effectiveness were low and remained statistically insignificant throughout treatment. The fact that there were multiple extra-group relationships between patients and therapists might, in part, account for the low correlation in that area. Due to other responsibilities of the therapists on the in-patient wards, they assumed numerous roles relative to the patients, i.e., group therapist, social worker on the ward, member of psychiatric team which represented some power over the patient, and with some patients, as their therapist in a casework relationship.

A variety of factors that had a limiting influence should be considered when evaluating the findings. The first, in the area of general limitations, was the military setting wherein military rank might have an impact upon attitudes toward the therapists. The second major area of

limitations was that of the therapeutic structure in which the study was conducted. First, both an open-ended and a closed group were included, but not compared. There were only four therapists and two groups used as a sample (other groups were under study). Researchers were the therapists-participants in this study. No attempt was made to measure the degree or type of transference relationships that developed in the groups that might have affected the patients' perceptions. Another possible limitation was the validity of the use of mean scores of group members to represent overall group perceptions. The rating instrument was limited to measure perceptions of the therapists in their therapeutic role only. Finally, the tentative and conditional support of the first hypothesis was felt to be largely influenced by the positive skewing effect that items in the subarea of technics had on the overall correlation.

#### CONCLUSIONS

The first hypothesis was only conditionally supported; the second hypothesis was not supported. Allowing for the relative accuracy of the measurement of the instrument, therapists were more aware of patients' perceptions in the area of direction and control and technic and less aware in the areas of relationship and therapist's effectiveness.

We feel that this study should be extended to include the exploration of more areas of perception, and a larger sample of patients and therapists for increased accuracy. We also suggest that additional studies employ the use of other instruments to measure perception and awareness in order to further validate the instrument designed for this study. Finally, we suggest that a study employing the measurement of transference would provide a better understanding of its impact on perception and awareness.

This study is only a beginning attempt to examine therapists' awareness of patients' perceptions. Further refinements and expansion of technics in this area of investigation appear to be needed.

APPENDIX

OPINION QUESTIONNAIRE

The purpose of this questionnaire is to determine how group therapy members see their therapists. The questionnaire is part of a research project being conducted by part of the staff of Wilford Hall USAF Hospital, Department of Psychiatry. The information given will be used strictly for research data purposes and will have no effect upon your treatment or disposition. It will be seen by your group therapists only after the group terminates and your name will never be used in conjunction with reporting of data or results.

\* \* \* \* \*

1. Tell in your own words how you see \_\_\_\_\_  
as a therapist in your group.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Indicate the degree to which this person, as one of your therapists, has these characteristics, interests, traits, etc., by making an X on the lines as in the examples below. Since your views may change, you will be asked to fill out this questionnaire a number of times during the course of your group therapy experience.

Example A: Likes people      NEVER      ALWAYS  
I \_\_\_\_\_ X \_\_\_\_\_ I

Example B: Shakes hands      I — X — \_\_\_\_\_ I

-----  
Is interested in me      NEVER      ALWAYS  
I \_\_\_\_\_ I

Discourages participation      I \_\_\_\_\_ I

	NEVER	ALWAYS
Offers suggestions and advice	I _____ I	
Helps me express feelings	I _____ I	
Encourages group to establish its own goals	I _____ I	
Is a friend	I _____ I	
Helps the group members get better	I _____ I	
Asks questions that help me understand myself	I _____ I	
Is an effective therapist	I _____ I	
Controls over-talkative members	I _____ I	
I depend on him	I _____ I	
Gives information	I _____ I	
Sees part of me as healthy	I _____ I	
Helps me understand my actions	I _____ I	
Helps me express anger	I _____ I	
Rejects me	I _____ I	
Overcontrols the group	I _____ I	
Helps me understand my feelings	I _____ I	
Hinders my getting better	I _____ I	
Comes to my assistance	I _____ I	
Is the leader of the group	I _____ I	
Shows interest in me	I _____ I	
Judges me	I _____ I	
Is concerned with feelings	I _____ I	

	NEVER	ALWAYS
Is active, speaks a great deal	I _____ I	
Confronts me with my behavior	I _____ I	
Has final authority in the group	I _____ I	
Is concerned with facts	I _____ I	
Keeps discussion meaningful	I _____ I	

3. Is the above therapist seeing you in individual treatment?

Yes \_\_\_\_\_ No \_\_\_\_\_

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A COMMUNITY MENTAL HEALTH APPROACH  
IN A MILITARY SETTING

Lewis H. Richmond

Robert D. Wallace

During the past decade all of us have witnessed the rapid growth of community mental health concepts and programs in our society. Today we see the establishment of an increasing number of comprehensive mental health centers, increased government spending for mental health, inclusion of community mental health programs in psychiatric residency training, and postgraduate fellowships in community mental health.

The community mental health approach has been present in the military for a long time. Tiffany and Allerton point out that "the concept of preventive psychiatry has tenure in the U. S. Army (4). They indicate that "the idea of evaluating and treating soldiers in their own military community rather than in the hospital" was first implemented almost 50 years ago. The primary mission of the military medical corps is the conservation of the fighting strength. This makes primary prevention the main goal.

Since its inception, the Mental Hygiene Division at Lackland Air Force Base (hereafter referred to as MHD) has been involved in the community mental health movement. The MHD was started in 1953 to determine the suitability of basic trainees for duty in the Air Force. As time passed, other functions were added. These included outpatient consultation and psychotherapy for personnel assigned to Lackland Air Force Base, for officer trainees, and for trainees in cryptography and security police schools. Subsequently, outpatient psychotherapy was made available for dependents of Lackland Air Force Base permanent party personnel. Recently we have assumed training and research functions as well.

The MHD at Lackland is part of the Directorate of Base Medical Services of Wilford Hall Hospital. The major Air Command is Air Force Systems Command. The staff of the largest MHD in the Air Force currently consists of four

psychiatrists, one psychologist, four social work officers, an NCOIC, two psychiatric technicians, and two secretaries. The psychiatrists have a broader role than is usual in a community mental health program. The military requires a psychiatrist to make evaluations for medical discharges, behavioral deviation, physical profile changes, court-martial actions, medical board actions, determinations of mental responsibility, decisions for hospitalization, evaluations of suicide potential, security evaluations, and the dispensing of medication. However, each mental health professional, regardless of his particular specialty field, has a relatively free hand in evaluating and decision-making because he must rapidly deal with large numbers of people. In questionable or difficult evaluations where the course of action is unclear, consultation among staff members is the rule.

Our staff is involved in frequent intragroup consultation, education, and exchange of ideas. Our communications include a weekly intake conference at which new cases are discussed; a weekly professional conference at which interesting case reports or other items of interest are presented and discussed; a weekly seminar in basic behavioral sciences; and a weekly administrative conference. Occasionally outside consultants participate in these meetings. Frequently, new ideas are brought back from outside conferences and workshops which staff members attend. The junior officers are given supervision on a regularly scheduled basis by the senior staff members.

At this time we will detail the five parts of our mission.

The first part of our mission is to provide consultation and assistance to improve mental health and prevent psychiatric breakdown. Mental health not only implies the absence of disease, but it also implies stability and adaptability. Our approach emphasizes primary prevention by providing consultation and support to all levels of command at Lackland Military Training Center. A representative of MHD attends the weekly meetings of the Basic Military Training School. These meetings are conducted by the School Commander and are attended by the commanders of the training squadrons. Here, policy is announced, problems are discussed, and group or individual interaction between the School and MHD personnel is encouraged. Since Lackland is a training center, the Training Instructor is a key person and in many ways is the caretaker described in the book by Caplan (1). Each Training Instructor is responsible for approximately 40 to 60 trainees

at any given time. Seminars with the Training Instructors of the Basic Military Training School are conducted periodically so that each instructor is involved in a four hour program each year. These seminars deal with the psychology of adolescence, the effect of stress within the training situation, and the fundamentals of recognizing sources of potential trouble. In addition, we suggest program changes intended to prevent potential problems. Free discussion is encouraged and stimulated. Seminars are also conducted with newly assigned training instructors while they are undergoing their own introductory courses in an attempt to familiarize them with the above-mentioned factors.

The second part of our mission is to provide evaluation, immediate treatment, and assignment or discharge recommendations on psychiatric disturbances arising or identified during military training. Here the emphasis is on secondary or tertiary prevention. Crisis intervention is frequently employed. The individual who is referred to us comes after counseling has been attempted within his own squadron and when more professional help is indicated. He is seen on the day of referral since we maintain no waiting list for personnel in training status. Our orientation is to retain personnel for further military duty if at all possible. Many times a definitive disposition is not made on the first evaluation. When there is much evidence of difficulty that will preclude successful adaptation, we make an appropriate recommendation for either medical or administrative separation. If it is felt that brief therapy or counseling is indicated, we will pursue this course. In addition, we do psychodiagnostic testing when indicated as part of the evaluation. At present we also conduct group therapy with basic trainees in an attempt to salvage them for further duty. We suspect, though we are still in the evaluating phase, that the group therapy provides the symptomatic trainee with the supportive experience of seeing others with similar problems and the supportive feeling of group solidarity and identification. Even after men are recommended for discharge, we continue to be involved by sending teams to the discharge barracks to discuss problems occurring during discharge processing and to discuss problems of readjusting to civilian life.

To understand the community which they serve, newly assigned MHD officers initially spend time in the training situation. They tour various areas of the training school and observe flights in training. Hopefully, this results in a better understanding of the community from which symptoms

may arise and a better relationship between the staff of the Clinic and the Basic Military Training School.

The third part of our mission is to provide consultation and support to all agencies concerned with evaluation and assignment of personnel into nuclear, security, and other sensitive military positions. The MHD was quite active in contributing to the initiation and support of the Special Assessment Unit which performs evaluations for these job placements. We now conduct biweekly seminars with the Special Assessment Unit personnel and see their referrals. We also hold seminars with the Air Police officers to assist them in handling security problems. In addition, we receive referrals from the Flight Surgeon's Office on personnel who come under the Human Reliability Program.

The fourth part of our mission is to provide psychiatric outpatient diagnostic and treatment services to personnel assigned to Lackland Air Force Base and to their adult dependents. Here we employ various treatment technics including individual, family, and group treatment; marital counseling; and environmental manipulation. More recently, unit group consultation (3) has been used with permanent party personnel. This community mental health technic consists of MHD involvement with a group containing the nominal patient, a peer, and key personnel in the patient's environment. This is akin to family crisis intervention.

The final part of our mission is to participate with the Department of Psychiatry, Wilford Hall USAF Hospital, in programs of psychiatric training and research. We enjoy a mutually beneficial working relationship with the staff of the psychiatric department. The third-year residents rotate through the MHD for their community mental health training. In addition, we give individual supervision to other residents and at times present at the departmental conferences. We use the hospital inpatient facilities when necessary. From our contacts with the staff of the psychiatric department and their consultants, our professional knowledge increases.

We have an active research program at MHD. Current projects include a study on the effect of imipramine in treating enuresis, a study on the incidence of suicide gestures among basic trainees, and a study of the psychiatric and psychologic characteristics of narcoleptics.

We are involved in other aspects of our immediate community including lecturing to newly assigned interns about mental health and participating in discussions with the base legal officers concerning problems mutual to psychiatry and the law. We have extended our contacts within the community at large to include holding exchange seminars with Army personnel from the Mental Hygiene Consultation Service at Fort Sam Houston and to holding office in the county professional societies.

We would now like to illustrate statistically some practical aspects of our community mental health approach. We hypothesized that as mental health personnel became more active in dealing with the community at large and particularly in practicing primary prevention, the referral rate for symptomatic individuals would decrease. Our figures reveal that the referral rate of basic trainees to MHD since fiscal year 1960 has generally decreased (table I). The figures show a marked decrease beginning in fiscal year 1966 when the referral rate dropped by approximately 50 percent. Our findings reveal further that the number of basic trainees who were eliminated from the Air Force for administrative reasons decreased similarly (table II). Based on this decrease in separation rates, it is estimated that 6,360 basic trainees were retained who would have previously been discharged from the service during fiscal years 1966 and 1967 (table III).

TABLE I

Referral rate of basic trainees to MHD

Fiscal year	Number of basic trainees referred to MHD per 1000 input
1960	79.40
1961	57.63
1962	49.70
1963	52.41
1964	49.41
1965	42.13
1966	19.92
1967	24.07

TABLE II

## Administrative separation rate of basic trainees

Fiscal year	Administrative separations of basic trainees per 1000 input
1962	43.96
1963	46.93
1964	42.73
1965	37.32
1966	15.04
1967	18.30

There are several factors that should be considered in attempting to explain the above findings.

1. The rate changes coincided in time with an increased attempt by the MHD staff and personnel of the 3720th Basic Military School to have the latter become more actively involved in recognizing and dealing with problem trainees prior to routinely sending them for evaluation at the MHD. When training personnel were asked for their explanation for the above figures, they responded that the mutually beneficial relationship between MHD and the School was responsible. They particularly cited our program which familiarizes training instructors with the preventive approach and the School's indoctrination of newly assigned MHD personnel in the basic training environment.

2. Another possible factor involved is our increased treatment program. The average number of visits per basic trainee to MHD has increased from 1.2 in fiscal year 1965 to 2.0 in fiscal year 1967 to 3.8 for the first portion of fiscal year 1968. Associated with this has been an increase in the number of field and phone contacts between MHD and the Basic Training School.

3. An argument could be raised that the lowered referral and discharge rates mean the trainees successfully complete basic training only to be eliminated at a later date. However, figures reveal that the overall number of involuntary discharges among the enlisted personnel in the Air

TABLE III

Projected separation rate of basic trainees

Fiscal year	Administrative separations during basic training		Projected figures if rate (42.74/1000)* had remained constant		Number "retained" = projected rate minus actual separations	
	Rate/1000	Number	Number		Number	
1966	15.04	2256	6411		4155	
1967	18.30	1651	3856		2205	

Total 6360

\*Projected from average of administrative separations/1000 input FY 62-65

Force after completion of basic training has progressively decreased with the most significant decrease again being reflected in fiscal year 1966 (table IV).

4. Another question that might be raised is that there is increased motivation among basic trainees to make a successful adaptation in the Air Force in order to avoid discharge, and subsequently, the draft which would increase their chances of being sent to Vietnam. This remains a matter for conjecture.

5. Another factor affecting the discharge rate may be that the educational standards for enlistment have increased during recent years. Past studies have shown that high school graduates have a higher completion rate in basic training than non-high school graduates (2). Indeed, there has been a definite increase during recent years in the percentage of basic trainees who have completed high school prior to entering the military. However, when discharge rates of high school graduates during the past two years are compared with those of high school graduates of prior years, there is a greater than 50 percent decrease (table V). There also has been a similar decrease in the discharge rate among non-high school graduates. Thus, increased educational standards do not solely explain the overall decreased discharge rate.

TABLE IV

Involuntary discharge rate after basic training

Fiscal year	Air Force-wide involuntary discharges (non date-of-separation discharges) among enlisted personnel after completion of basic training
1958	20,000
1961	14,880
1962	12,770
1963	12,574
1964	11,357
1965	11,059
1966	6,913
1967	6,491

TABLE V  
Discharge rates of high school and non-high school graduates

Fiscal year	% High school graduates/ total basic trainee input	% High school graduates receiving administrative separation/input high school graduates	% Non-high school graduates receiving administrative separation/input non-high school graduates
1962	85.7	3.1	11.9
1963	79.8	Not Available	Not Available
1964	83.9	Not Available	Not Available
1965	91.2	3.0	8.8
1966	92.7	1.2	4.4
1967	96.4	1.4	5.5

Despite the many possible explanations for the decreased referral and discharge rates, we think that a significant factor is the expansion of community mental health concepts into Air Force psychiatric programs not only in basic training but also throughout the airman's military career.

In summary, a report has been presented of the activities of the Mental Hygiene Division at Lackland Air Force Base. The community mental health model has been used as a basis for its operation with particular emphasis on preventive psychiatry. We have attempted to show that by increasing the awareness and competency of environmental caretakers and of mental health personnel in dealing with environmental problems, there results less emotional morbidity requiring professional handling. An attempt has been made to explain the decreased discharge rate of Air Force basic trainees. The community mental health approach appears to contribute to this finding.

#### Acknowledgment

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## A CHAP CHILD GUIDANCE CLINIC IN A USAF HOSPITAL

Carl M. Pfeifer

There are presently six programs in the Air Force wholly or partially sponsored by CHAP (Children Have A Potential) which provide some form of psychiatric aid to minor dependents of Air Force personnel. These programs are located at Keesler AFB, Mississippi; Andrews AFB, Maryland; Clark AFB, Philippine Islands; Lakenheath AFB, England; USAF Hospital, Wiesbaden, Germany; and Wilford Hall Hospital, Lackland AFB, Texas. These programs differ considerably in their structure, mode of operation, and range of service. This paper is a report about the structure, function, and program of certain aspects of the Wilford Hall CHAP Child Guidance Clinic during its first 18 months of operation.

The Air Force has recognized for many years the need and desirability of providing comprehensive medical care for dependents including the full range of medical care for children (in using the term children, I am actually referring to children, adolescents, and their families). Most of the medical care provided has been rather comprehensive, however psychiatric aid for children has generally lagged far behind other medical care. This situation essentially is no different than in the civilian community.

San Antonio is a rather large military community with 4 Air Force bases and an Army post located in the immediate San Antonio area. The number of military personnel attached to these bases is estimated to be over 50,000. In addition, San Antonio has about 15,000 retired military personnel entitled to medical care. Thus, in the immediate San Antonio area there are at least 65,000 military personnel to be served by the medical facilities. The number of minor dependents (under 17) of these personnel is not known, but if a very conservative estimate of one child per military person is used as a basis for estimating the number, this would mean that there are at least 65,000 children who are eligible for medical care in San Antonio. In the civilian community, it is estimated that 6 to 12 percent of the child population is in need of psychiatric care. In addition, no less than 10 percent of the children in school have significant

educational problems, and emotional factors are often an important variable to be assessed in evaluating these learning problems. If 10 percent is used as the minimum number of children needing psychiatric help, at least 6,500 children of military families in San Antonio are in need of psychiatric help at the present time.

Since San Antonio has had only one child guidance clinic to serve the entire community, now numbering over 700,000, the Department of Psychiatry at Wilford Hall Hospital has attempted to provide psychiatric aid to children who were in need of such care. For several years prior to 1966, psychiatrists, psychologists, and social workers stationed at Wilford Hall Hospital who had training or interest in children saw some of these children. However this rather informal setup was clearly insufficient to meet the need, and in April 1966, under the initiative of Major Daniel Anderson, a military child psychiatrist, and with the support of Colonel Martin Giffen, Chairman of the Department of Psychiatry at Wilford Hall, a formal child guidance program was established. This program, known as the CHAP (Children Have A Potential) Child Guidance Clinic, was a cooperative effort between the Department of Psychiatry, Wilford Hall Hospital, the CHAP Program of the Air Force, and the Air Force Aid Society. The CHAP Office, with funds from the Air Force Aid Society, agreed to provide salaries to hire three civilian social workers, one civilian psychologist, and two secretaries. The Department of Psychiatry provided a military child psychiatrist who would act as director of the clinic and the physical plant within which the guidance clinic would operate. These agreements culminated in the opening of the Wilford Hall CHAP Child Guidance Clinic in April 1966. Major Anderson, the man primarily responsible for the formation of this clinic, was its director until his retirement from the Air Force in June 1967.

#### THE TREATMENT PROGRAM

As in the civilian community, it has become clear that the need for psychiatric care for military children is so large that a clinic such as ours could not provide complete help to everyone in need. Therefore, it was decided that as a minimum goal, we would try to provide diagnostic and consultation service to all of the children in need of such care if possible. It seemed that this degree of help should be available regardless of the future ability of the clinic to treat all of these children and/or their families. A

corollary to this was our attempt to find a way to avoid the long waiting periods of two, four, or six months so common to child guidance clinics throughout the country.

With these two goals in mind, an intake procedure at the clinic has been established which allows a child to be seen within two to four weeks after application and to have a diagnostic evaluation completed, in most cases, within one month of the child's first appointment. Because we think that the ability to see children within this relatively brief period after application may provide a model for other bases, and considering the formation of a child guidance clinic in dealing with the extensive demands that inevitably will be placed on such a clinic, I wish to take a few minutes to describe the intake procedure used at the CHAP Clinic.

After the initial contact is made with the clinic regarding the child, whether this be from the school, the parents, another medical facility, or any other source, the parents are contacted by our clinic and asked to complete two forms. The first of these is an introductory form that requests a description of the presenting problems of the child as well as various demographic data such as the child's age, birthdate, school, and grade; the family composition; the father's age, rank, job, and education; the mother's age, education, previous marriages, etc. The second form is a developmental check sheet. This covers topics such as the history of the birth and delivery; motor, language, perceptual, psychosexual landmarks and deviations, etc. Areas of deviancy indicated on these forms are explored in greater detail during the formal history taking. We find the use of these forms can be quite time saving for the historian in gathering certain "routine" factual data. In addition, a letter requesting information from the school is either given directly to the parents or mailed to the school.

When the two forms and school report are completed and returned to the clinic, the case is then reviewed in a weekly intake-screening conference attended by the director of the clinic, the chief social worker, and the administrative assistant of the clinic. With the information provided from the two forms, the school report and the original referral, we have found it possible to make a decision in a very brief time period (90 percent of the referrals) as to what further action should be taken by us. An interesting sidelight in the use of this procedure has been the ability to separate out the "unmotivated" parents who do not proceed beyond the initial referral from those who will continue through the

evaluation. For example, in the past four months, the clinic has received 40 to 60 referrals a month. However, only 50 to 60 percent of the parents of these children actually go as far as to fill out the forms and return them to the clinic. It is only at this point that the case is considered to be active. Of those parents who proceed this far, an exceedingly high percentage (close to 95 percent) follow through with the complete evaluation process. At the intake-screening conference about 75 percent of the referrals are scheduled for a complete social history followed by psychiatric evaluation by a psychiatrist. The decision as to whether psychological testing should be done is made after the child has been seen by the psychiatrist. About 60 to 70 percent of the children who are seen by the psychiatrist subsequently have psychological testing. Approximately 10 percent of the referrals are scheduled for only psychological testing at the time of the intake-screening conference. These are mostly children in whom there is a very high suspicion of mental retardation or who need testing for special education classes. Thus, about 60 percent of the children seen in the clinic are tested. The remaining 10 to 15 percent of the referrals are referred to another agency or referred to another medical department such as neurology, scheduled for an exploratory interview with the social worker to clarify the nature of the referral, or occasionally, rejected as not needing a psychiatric evaluation. The advantage of such an intake-screening conference at this stage in the family's contact with the clinic is that in a one to two hour period a week, decisions about most of the cases referred to the clinic can be satisfactorily made. This saves considerable professional and administrative time that can be used more productively.

After the intake conference the parents are scheduled, usually within two weeks, for their first appointment for a history. This appointment is usually with the social worker but occasionally with the psychiatrist. The following week the child is seen by a psychiatrist. If the psychiatrist thinks that psychological testing is needed, the testing will be carried out the following week. In some instances the history, psychological testing, and a psychiatric interview are all done on the same day. Other consultations that may be indicated, such as a neurologic or pediatric examination, may also be obtained by the psychiatrist. However, since these evaluations are done in other clinics, they usually take somewhat longer than psychological testing which is done within the CHAP Clinic. One of the advantages of having the psychiatrist examine each child is that he can often perform many of these other medical procedures himself and thereby

limit the number of consultations for these children who clearly need to be examined by another specialist. As should be evident, the procedure used in our clinic clearly makes the psychiatrist the general "case manager" throughout the diagnostic process. This is based on my belief that the correlation between symptomatology, developmental and social history, and psychologic testing with the findings by the psychiatrist on direct examination of the child is often quite poor. Therefore, if the psychiatrist functions in the role of a "consultant" and attempts to reach a formulation only on the basis of the data and impressions gathered by other disciplines, his formulation will often be inaccurate. If on the other hand the psychiatrist should choose to see the child after a conference where the other team members present their findings, then, it seems to me, this premature conference has been a poor use of his time. In addition, psychologic testing is most valuable when the psychiatrist, on the basis of his examination of the child, can ask for clarification of certain specific areas by the psychologist rather than the frequent vague request of "Please do psychologic testing." Further, I believe the child psychiatrist should be in this central case-manager role because his training and experience probably makes him the member of the team most able to integrate findings from such diverse fields as pediatrics, neurology, speech, psychology, social work, and education. In the CHAP Clinic, 90 percent of the children evaluated are examined by the psychiatrist. This, of course, means that the number of children who can be evaluated is limited by the time available by the psychiatrists. Presently we are able to see about six children a week for complete evaluations or approximately 250 to 300 a year. In addition, approximately 50 children yearly are seen for psychologic testing only.

Besides the children who go through this more "formal" diagnostic process, other evaluations are performed outside of this structured routine procedure. The Department of Pediatrics and the CHAP Clinic hold a weekly behavior clinic in the pediatric department. Here, interns and residents in pediatrics present two cases each week to a staff member from the CHAP Clinic. The attempt here is to help these interns and residents manage these cases within the framework of the pediatric outpatient clinic. Some of these cases are eventually referred to the CHAP Clinic for more extensive psychiatric evaluation. Finally, psychiatric evaluations are carried out on an inpatient consultation basis and as emergencies. Interestingly the number of genuine emergencies

referred to our clinic has been relatively low and probably does not number over 25 per year.

After the evaluative process has been completed, as determined by the psychiatrist, the members of the clinic staff who have participated in the evaluation review their findings with the clinic director, reach a diagnostic formulation, and make recommendations. The recommendations may be divided, for the sake of simplicity, into those cases where some form of outpatient psychiatric treatment seems indicated, a recommendation made in about 60 to 70 percent of the cases in the CHAP Clinic, and those cases in which outpatient therapy is not indicated. This latter category includes those children and families where no significant pathology has been found and which runs as high as 10 to 15 percent. Also included in this category are those children who are felt to need primarily special education and those children with whom outpatient care is considered to be insufficient and for whom we recommend placement in some special setting such as in a residential treatment center, a state hospital, special schools, etc.

The largest group of children and families, however, fall into the category of those we believe need and can benefit from outpatient treatment. Based on the policy of trying to provide services for as many children in the military community as possible, we have undertaken to limit the number of children who we will see in long-term individual therapy. This treatment modality, which is the traditional approach in child guidance clinics, leads to a small number of children receiving intensive individual therapy and very rapidly depletes the professional staff time available to do treatment. Thus, many other children in need of treatment are left to fend for themselves while a small number receive treatment for one, two, or even three years. In the Wilford Hall CHAP Clinic, we have chosen to limit the number of cases seen in long-term therapy to about 1/3 of our potential treatment load. Of this 1/3, about 20 to 25 percent of the children are seen individually while their parents receive casework counseling, and the remainder are seen in long-term family therapy. The majority of the treatment in the CHAP Clinic is presently being undertaken in an exploratory, experimental vein in an attempt to find ways to best meet the great demand upon the clinic while still providing good treatment. We have become quite interested in family therapy as a major treatment approach and have recently undertaken an experimental project in brief family therapy. Close

to 50 percent of therapy in the clinic will be treated under the auspices of this brief family therapy project.

The families selected for this project, at the end of the diagnostic process, are told that the problems being displayed by the child are actually problems that involve the entire family. We suggest that the family come into the clinic as a family to discuss these difficulties and ways of solving them with one of our staff members. The family is then scheduled for two introductory sessions with the therapist. The purpose of these initial two sessions is to gather historical material oriented specifically toward the family system, to reach a family diagnosis, to expose the family to this modality of treatment, and to finally assess whether it is possible to work with the family in this manner. If at the end of these two sessions the therapist and the family can jointly reach an agreement that these sessions seem to be potentially valuable, the family sessions may continue for six to eight more weeks. It is obvious that many of the problems presented cannot be completely resolved in this brief period of time. However, we think that often more progress can be made in brief periods of time than has formerly been thought. We are interested in knowing in how many and in what kind of cases significant progress or even resolution of difficulties can be made in this period. A number of alternatives are available following these eight to ten sessions. The family and therapist may jointly choose to terminate at this point. Some of the families who are only starting to become involved may be interested in continuing therapy. We are considering the possibility of using more traditional group therapy at this point, particularly for adolescents and parents. Some families may be referred to private therapists in the community after this beginning. Hopefully, these families would be more involved than had they not had some family therapy. Some families may choose to maintain contacts with the clinic on a less intensive basis. This whole project, as I hope is clear, is purely experimental at this point. Under present plans, we expect to be able to see between 75 to 100 families in this project over the course of the next year. We hope to be able to report the results of this project at a future date.

Other treatment modalities being used in the clinic at present include group therapy of adolescents, behavior therapy, parent counseling, a medication clinic, and a short-term group for parents of brain damaged children.

The clinic has established contact and working relationships with several other agencies in the community serving children, and the facilities of these agencies are available for evaluation and/or treatment as necessary. At present the closest contacts are with the Bexar County Community Guidance Clinic and the Harry Jerzig Speech and Hearing Center, an agency specializing in communication disorders.

#### THE TRAINING PROGRAM

I would like to briefly describe the part the CHAP Clinic plays in the training of psychiatric residents at Wilford Hall. Wilford Hall has an accredited three-year training program in general psychiatry. In order to gain required experience in working with children and adolescents, second-year residents spend approximately 1/4 time in the second quarter and approximately 1/2 time in the third and fourth quarters in the CHAP Clinic. Their rotation through the clinic has been designed specifically with the purpose of trying to make their experience valuable to them in their future roles as general psychiatrists. The program for them should thus differ in several areas from one for child psychiatrists. The goals of the program are to attempt to expose them to normal growth and development in children; to help them better understand the relationship between childhood experiences and adult personality structure; to help them recognize and diagnose deviant personality development in children; to gain an understanding of some of the dynamics of psychopathology in children; and finally to have some understanding and familiarity with the major treatment approaches used in child psychiatry, particularly medication, special education, and family therapy. One of the major differences between these goals and those involved in the training of child psychiatrists is the de-emphasis on psychotherapy. It seems to me that learning child therapy requires a rather extensive time commitment, and this area should be left for those who choose to become child psychiatrists. A second major difference is the work with inpatients which I think should be a part of the training of general psychiatry residents on their child rotation. If general psychiatrists can be taught to distinguish between psychoses, organic adjustment, and educational problems, then these psychiatrists can play a significant role in helping many of these children and families while leaving the more difficult problems and intensive treatment to child psychiatrists.

Specifically then, the residents, during their rotation through the CHAP Clinic, see one to two children per week for diagnostic evaluation. Each case that they see is supervised by a staff psychiatrist. They help in answering emergency consultations, and they run the "medication clinic" for a three month period in order to learn how to administer psychotropic drugs to children. They are exposed to the use of psychologic testing with children and to learning disorders that are so frequently sent to the psychiatrist. In addition, they carry a small number of cases in treatment employing both individual and family therapy. They are encouraged to carry at least one of their treatment cases on into their third year with continued supervision. For any resident who is interested, an opportunity to run an adolescent group is made available toward the end of his rotation, and the group is continued into his third year during which time he may attend a seminar on adolescent group therapy.

Seminars are held throughout the year for both the residents and clinic staff and include a weekly case conference and a weekly seminar on family therapy. A 10-week lecture series on basic concepts in child psychiatry is held during the residents initial three-month period in the clinic dealing with such topics as nosology in child psychiatry, interview technics, drug therapy, and community psychiatry. A literature seminar on basic readings in child psychiatry is held weekly from January through June. Experience and training for several other professionals is being provided in the CHAP Clinic. At present, one military social worker is working a day and a half in the clinic. A second-year student from the local school of social work is spending five months full time in the clinic, and one of the staff psychiatrists is in the clinic about eight or nine hours per week.

#### CONCLUSIONS

In the remaining few minutes I would like to offer a few observations from my six months of work in the CHAP Clinic with children of military personnel. First, the types of problems seen in our clinic do not seem to differ significantly from problems presented in civilian child guidance clinics dealing predominantly with middle class populations. Secondly, the absence of the father because of a remote assignment or for a prolonged period not infrequently precipitates behavior in one of the children that results in a referral to our clinic. This seems more the final straw in children or mothers who are already vulnerable. Thirdly, it

seems the severity and frequency of "acting out" behavior is less, particularly in preadolescents, than that seen in civilian child guidance clinics. There seems to be a higher percentage of neurotic or withdrawn children than in civilian clinics. Fourthly, the percentage of children brought to the clinic, in whom we find no significant psychopathology or very minor maladjustment, seems to me higher than in clinics dealing with civilian populations.

I would again like to re-emphasize that the above are strictly my own clinical impressions and are not, at this time, based on specific data from our clinic. These impressions do, in general, agree with the few other psychiatric studies of military children that have been published. However, we are presently in the process of studying the population seen in our clinic much more systematically with particular emphasis on father absence, mobility, family structure, and diagnosis, and we hope to be able to report on these findings in the future.

## IMPROVING THE MANAGEMENT OF CHILDREN BY GROUP BEHAVIOR THERAPY OF THEIR PARENTS

Wallace Bloom

Ayllon and Michael (1) report an approach using group behavior therapy of parents in assisting them in becoming more effective with their children. The author, presently a staff member of the CHAP Clinic at Wilford Hall Hospital, had previously used a technic to help parents with child rearing problems and was selected as the therapist for the pilot program, initiated and reported here, to work with parent groups whose children had similar problems. Meetings were scheduled weekly at the clinic for six to eight weeks. Parents of children identified as "minimal brain injured" (MBI) were thought to need help initially because many of these children often had poor impulse control. The therapy goal was to help the parents learn and practice more effective ways of solving their own problems in the management of their children.

### METHOD

#### Subjects

Four sets of parents with "minimal brain injured" (MBI) children were selected for the pilot group. Included in the study was one girl and three boys ranging in age from 7 to 10 years.

#### Procedures

1. The therapist reviewed the causes of MBI and discussed associated behavior problems at the first group meeting.
2. Each parent listed two things the child was doing or not doing that annoyed the parent most.
3. Lists were discussed and various behavior modification technics were explained.

4. A behavior modification project for each child was selected and baseline data accumulated as to type, frequency, intensity, and duration of the child's disruptive behavior.
5. Parents in group and as couples planned projects to include:
  - a. A goal that was to change the child's behavior directly and in the natural setting at home.
  - b. Parents were to concentrate their efforts on the specific problem behavior, preferably one problem at a time.
  - c. Parents were to plan to change behavior in the desired direction in small progressive steps.
  - d. Parents would keep record of the behavior in objective terms and on the frequency of the occurrence of desired behavior or the duration of non-occurrence of disruptive behavior.
  - e. The behavioral goals were to be mutually accepted by the child as well as by his parents, and a "behavior contract" would be made to specify the observation periods, score keeping, and rewards and penalties.
6. Results and other observations were to be discussed at weekly meetings.

#### RESULTS

Child A was a 9-year-old girl who was overweight and asked for food between meals. The initially selected program was for her to earn stars by neither eating nor asking for food between meals. Each two stars allowed her to color a picture posted in her room, and when all pictures in a booklet were colored, she was to receive a lipstick she had chosen. After one week she received maximum stars and had voluntarily pushed aside a potato from a dinner plate as "too fattening." She also had spontaneously hugged her father when praised for her performance. At the fifth meeting the mother reported that her daughter had been crying more often, and frequently she could not find her shoes and wanted her mother's help. It was suggested that the mother make physical contact with her (such as by hand on her shoulder) when she helps her daughter look for missing shoes.

Both parents agreed to show more affection by some cuddling and sitting with her. At the seventh meeting they stated the child had responded to personal attention and physical contacts (hugs, walks hand in hand, etc.), was finding her own shoes, had received the lipstick, school grades had improved, and hyperactivity decreased. She is doing homework and reading on her own, voluntarily assisted in a home painting chore, and her weight had decreased. Father had curtailed teasing her by calling her "lumpy," and the new goal was to improve personal grooming.

Child B was a 7-year-old boy who had tantrums in connection with tooth brushing. His program let him earn pennies for each brushing except for morning brushings which had been exempted from the initial plan. He began to brush without complaints regarding the taste of toothpaste. His father also instituted a fixed interval reward (25 cents allowance for weekly chores) and noticed subsequent changes in general behavior (less tantrums and more verbal communications). Mother learned that the boy felt he didn't get a chance to talk with his parents. Later the mother reported difficulty in getting him to come to the table when called, not eating properly, and leaving food. Discussion indicated that repeated meal calls may have built up tension, and the parents agreed to let him pay a penny for each additional time he had to be called for meals. After paying three pennies in one week for the extra calls, these were no longer required. Since the meals are begun under less tension, the boy has been eating better and more pleasant social interaction is evidenced during the meals. School behavior was said to have improved.

Child C was a 7 1/2-year-old boy who usually (3 out of 5 times) failed to bring home books and homework from school. Given a chance to color in a section of a picture of a toy he wanted, and receiving the toy when all sections were colored, he achieved success. His parents learned that several times in the past when he had brought papers home they had been too busy to review them. Generalization of behavior was also evidenced by his finally learning to tie his own shoe laces. At the fifth meeting, it was brought out that this child was picking at the skin around his nails, particularly when watching TV, and it was proposed he be given something to hold to do things with. The child was given a TV guide to look at and picking ceased. By the last meeting this boy was bringing home maximum grades on his school papers and was taking pride in this.

The program for child D, a 10-year-old who frequently chewed on his fingers, included a one hour daily observation time at home with 12 random observations. Scoring was by the parent dropping a marble into either a can (failure for chewing) or jar (success for not chewing) following each observation. At the weekly payoff, four earned marbles added one cent to his allowance. The mother cited the boy as claiming "this is the greatest thing since bubble gum." Some improvement was discernible in one week. Father later brought home a timer which he set for variable periods, and he scored performance when the signal sounded. Mother claimed the boy was removing his hands when the signal sounded rather than keeping them away from his mouth. Father replied that his fingers were less chewed, and this project was temporarily suspended. Attention was shifted to the child's picking up things that belonged to others. He was instructed to give the money he found at school to the teacher, and if it were not claimed, it would go eventually to charity. Formerly he gave it to other children. Prior to the last meeting, the school principal told the parents about noticeable improvement in their son's behavior. The parents noted a decrease in the number of things he picked up both at school and in the neighborhood. The boy seemed very restless and under great tension while indoors during recent rainy days. Review of the medication program and consideration for further treatment are in progress as the child is both educably retarded and brain injured.

#### DISCUSSION

Perhaps of greater interest than changes in the behavior of the children were changes in the behavior of the parents. Prior to the group therapy, these parents had frequently responded to their children's maladaptive or disruptive behaviors by negative reinforcement (e.g., physical punishment, scoldings, loss of privileges, etc.) and had little success. It was noted that:

1. The knowledge and experience that parents gained with behavior modification technics had broadened their choices of responses when dealing with initially selected and other presented problems.
2. Discussions of differences between what mothers and fathers independently reported as the two most annoying behaviors of their own children had increased effective communication between spouses and new insights were acquired.

3. Inclusion of the child in a "behavior contract" had improved communications and understanding between child and parents.

4. Reported activities of parents were socially reinforced by comments of other group members as well as by the therapist.

5. The initial success children had in modifying their actions under the "behavior contract" led to improved self-control and more appropriate behavior in other situations and seemed to lead to more positive self-concepts and feelings of adequacy.

Other observations and findings were that the trial two-week period between meetings slowed down the therapeutic action according to comments of the participants who preferred weekly meetings. Sustained treatment in the form of a few "carry-over monthly meetings" after conclusion of the last scheduled meeting was requested by the participants. Inclusion of the parents of a child who was retarded as well as "minimal brain injured" with parents whose children were not retarded led to some reluctance on their part in discussion of the additionally handicapping factor and its implications. The Hawthorne or placebo effects of any change in the situation had to be carefully discussed to temper premature jubilation concerning initial results. Further research will be done to ascertain the stability and direction of reported behavior changes.

#### CONCLUSIONS

The initial findings suggest that group behavior therapy with parents can be an effective method of treatment for improving the management and the behavior of some children. The brain injured children, perhaps even more than typical children, needed and responded favorably to the consistency of parents' behavior and to structured, stable situations. They modified their behavior as a consequence of the results of that behavior. In psychodynamic terms, there have been probable increases in their ego-strengths and self-concepts from having been successful in their projects while, in a psychosocial context, the social interactions between family members have improved.

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THE DEFINITIVE CARE UNIT:  
A NEW APPROACH TO AN OLD PROBLEM

Jerry Plummer

This paper is being presented for a twofold purpose: (1) to describe the development and operation of a new treatment program within the Department of Psychiatry at Travis Air Force Base, and (2) to focus attention upon the need of the Air Force to provide tangible services to persons being medically discharged from its ranks.

RATIONALE

Throughout the Air Force system, and indeed throughout the entire military system, numerous persons are medically discharged each year. In fiscal year 1966, 5,545 airmen were medically separated with and without severance pay (1). At Travis Air Force Base alone, 818 airmen (Thirty patients were excluded due to uncertainty of disposition at the time of record review.) were discharged for medical reasons; of that number, 146 or 17.8 percent were medically separated from the service for psychiatric reasons (4). This number may seem unusually large, but it is tempered by the fact that Travis Air Force Base is the referral center for psychiatric casualties from ten western states. In addition, it receives a great proportion of those psychiatric casualties air-evacuated from outside the Continental United States. In 1966, a total of 514 persons were admitted as inpatients to the Department of Psychiatry at Travis Air Force Base; from January 1967 to 10 December 1967, 492 patients had been admitted, an average of 44 patients per month (3).

Many, if not most of these persons, enter the Department of Psychiatry at David Grant USAF Hospital unaware that their mental condition will necessitate discharge from the service. It is not surprising then that they are shocked, and perhaps immobilized, when confronted with this fact. As the patient, or for all practical purposes the civilian and ex-airman, becomes able to incorporate this into his world of reality, he finds himself face-to-face with an unyielding wall of realistic questions--"What happens now? Where do I go?

What do I do?" And for a person in this position, these are appropriate questions to ask--indeed, what does he do? Where will he go?

Traditionally, the patient has been left to decide basically for himself. This is not to say that the medical personnel associated with the patient are not concerned with what becomes of him after hospitalization and discharge. Certainly each of us in the helping professions like to think of ourselves as being concerned with the totality of the patient, not only with his here and now, but with his before and after as well. Within the Department of Psychiatry at Travis, this concern was reflected in the active treatment program, one which we felt to be outstanding in the Air Force system. Yet, within the confines of this therapeutic community, one lack was observed which consistently implicated the needs of the patient being medically separated.

It was this idea of what becomes of the patient following discharge, concern over the question of "What does he do now?" and perhaps our own need to offer more, that provided the initial impetus for the formation of what we have termed the "Definitive Care Unit." This new unit was not conceived as an isolated program, for to function effectively it would require communication with, and the cooperation of, every staff member. The Definitive Care Unit became, then, but one important extension of the entire psychiatric effort.

#### METHOD

The Definitive Care Unit, referred to as the DCU, was initiated in January 1967. From its inception, the DCU was conceptualized as a program for patients being medically separated from the Air Force for psychiatric reasons. Consequently, those patients for whom a VA bed was anticipated were not accepted, nor were those persons being released from the service under the provision of AFM 39-12. Additionally, a patient was required to have a level 5 or 6 in accordance with the level system employed within the Department of Psychiatry which reflected an increased potential for responsibility from level 1 through 6. Weekly meetings were held with each ward psychiatrist to determine if he had patients appropriate for referral. Referred patients were then transferred to the Definitive Care Unit and interviewed by either the author or the wardmaster. At this time, the patient was asked to complete an entry questionnaire consisting of questions pertaining to reasons for hospitalization, disposition,

and future plans. In addition, a questionnaire was completed by the patient at discharge to assess growth, final plans for the future, and patient suggestions for program improvement.

#### IMPLEMENTATION OF THE PROGRAM

One of the major problems encountered from the beginning was the need for clarification of roles and delineation of responsibility primarily between the ward psychiatrists and the psychiatric social worker in charge of the unit. For instance, who was to make the decision for corrective action in the event of patient acting out? Who was responsible for approval of passes and leaves? And, who was to enter the required progress notes on DCU patients? Required clarification came about through personal contact with the physicians and frequent staff conferences, each motivated by staff members' interest in seeing the unit function effectively. Gradually a familiar policy was formulated in which the person in most contact with the patient assumed the responsibility, in this instance, the psychiatric social worker.

Prior to its inception, the physical area the DCU now employs was utilized as a holding ward for patients awaiting administrative processing of their paper work. They were permitted essentially to come and go as they wished providing they adhered to basic hospital regulations. With such a comfortable situation, it was not surprising that we met with initial hostility and resistance to the implementation of the first DCU program, the reinstating of group therapy on a three-time per week basis with a psychiatric social worker as primary therapist. In addition, the wardmaster met with the patient two times per week to discuss administrative problems, complaints, etc. Group process, in which the patients began to discuss their collective problems and attempt to formulate answers, became and has continued to be the primary therapeutic tool within the DCU.

In addition to the many real problems discussed within the group involving getting resettled, the majority of the patients were faced with a special decision--deciding who to tell, what to tell, and how to tell about their illness. This in turn prompted other questions which would eventually require a decision--"Should I be honest about my illness when completing employment questionnaires? Should I seek further therapy, and if so, from whom? Should I return to school? What will be my VA benefits?" and innumerable more. The emphasis of the entire DCU program has been to both aid and

facilitate each patient in explaining such problems and to realize their limitations and work within them.

#### PROGRAMS AND OPERATION

As the program continued, other needs appeared that had to be met if we were to offer a comprehensive, tangible treatment program. Efforts to meet these needs led to the creation of the following programs: (1) the guest speaker's program, (2) the patient work program, (3) the vocational testing and counseling program, (4) the usage of selected audiovisual aids, (5) the community referral system, and (6) the patient reference library.

Frequently patients would pose questions which the therapist was unable to answer. This pinpointed the need to bring additional personnel into the program who would be in a position to answer these frequently appearing queries. This, then, led to the establishment of the guest speaker's program whereby ancillary personnel could appear before the patient group to speak from their own area of expertise. One of the most valuable resources to date has been the Solano County Veterans Service Office which has proven to be of incalculable assistance in providing information pertaining to various Veterans Administration programs. Other personnel available to participate in the guest speaker's program include employers, personnel managers, representatives from various industrial and commercial organizations, and both employment and vocational counselors each of whom represent a fundamental characteristic of our society, the pursuit of a vocation.

In America's work-oriented culture, the measure of an individual's adjustment as well as his general worth is, in the eyes of many, the kind of job he holds and the competence with which he does it (5). This comes as no surprise as we have long valued the importance of work as an effort of fulfillment. Our patient governments reflect the value we place upon this most important of man's social roles. The meaningfulness of work and the pursuit of a vocation led to the incorporation of additional programs previously mentioned into the overall DCU effort.

The wardmaster within the Department of Psychiatry assigns each patient daily work schedules with the type work assigned dependent upon decisions by the doctor, social worker, and patient. Tasks vary from the patients performing as

a ward helper, to file clerk, to runner, all of which enables the patient to see himself as a competent person worthy of his own respect and that of others.

Formation of the vocational testing and counseling program was given impetus by the periodic appearance of a patient totally unable to plan for his post-military future, a condition possibly attributable to the nature of his illness or the paucity of his own inner or external resources. Consequently, extensive vocational data is now obtained from each patient who enters the Definitive Care Unit program in addition to the information supplied by the entry questionnaire. If a patient desires, he is given various vocational and occupational tests which furnish further additional information for counseling purposes in relation to the patient's interests, abilities, and aptitudes. With this battery of information regarding a particular patient's aspirations, assets, and liabilities, the DCU staff seeks to aid him in formulating some future vocational goals. Counseling is further facilitated by the use of the Dictionary of Occupational Titles obtained from the Department of Labor. This series of books has long been a central tool in vocational counseling among virtually all employment agencies. By structuring vocational guidance within the DOT frame of reference, DCU counseling becomes closely aligned to methodologies used by state and federal employment agencies.

The recent case of a 35-year-old airman first class offers an example of the value of the vocational testing and counseling program. In spite of group efforts to make this individual aware of his unrealistic future goals, the patient persisted with his plans to enter medical school. At the group's urging, he consented to take the Kuder Vocational Preference test and scored high in the mechanical area. The Wechsler Adult Intelligence Scale revealed him to be of dull-normal intelligence. With this information and continued confrontation and support by the group, the patient began to explore other vocations more in keeping with his interests and abilities. At discharge, he secured a position with a construction firm handling heavy machinery.

Patient direction toward adjustment can now be reinforced by the recent creation of a direct community referral system of DCU patients to the California Department of Employment and Rehabilitation. Should any patient wish additional vocational job counseling or testing, he is referred to a local office of the Department of Employment for such services and potential job placement. With the cooperation

of the local agencies, this is accomplished with a minimum of inconvenience to the patient and provides an important opportunity for him to sample the "outside world" while still a patient. Referral to the Department of Rehabilitation becomes particularly important for that patient ineligible for vocational training under the provisions of the Veterans Administration and who also lacks a marketable skill. The system as established makes it possible for patients to benefit from state rehabilitation services, and most importantly, to make contact with this agency while still hospitalized. At present, this referral system is operational only within California but will soon be expanded to a nationwide level.

An additional program, the selected usage of audio-visual aids, was instituted due to patient requests for additional information on mental illness and their voiced anxieties about now having a history of mental illness. To date, we have shown various films obtained through the drug companies and from the California Department of Mental Hygiene. The most outstanding success has been with a film entitled "A New Chapter" which deals with a patient discharged from a state mental institution and the problems he experiences adjusting to his family and in seeking employment. In addition to films, we have also used tape recordings, notably several by Dr. Murray Banks. The value of these aids has been reflected in group discussions and attitudes and occasionally in increased awareness of individual functioning.

Another continually expanding aspect of the DCU program is the patient reference library. Materials for the library have been accumulated with the cooperation of the Departments of Labor, Employment, and Rehabilitation as well as other state or federal agencies. Items available for patient use include The Occupational Outlook Handbook which lists and describes in detail some 700 occupations and the complete Occupational Guide Library published by the California Department of Employment. In addition, the reference library incorporated a complete listing of all open State Civil Service positions including pay, job description, locale, as well as extensive information pertaining to the employment outlook in several hundred other occupations.

It is important to stress here that none of the programs just discussed were in operation at the time the Definitive Care Unit was implemented. Instead, each new program arose as part of the total effort to directly meet collective patient needs. Each of these programs, then, together with

group therapy, implies a comprehensive, flexible, but ever progressive program.

## RESULTS

The ultimate test of any concept is its validity, the extent to which it accomplishes its stated goals. A followup research study is now in the planning phase and will be undertaken in the near future to assess the validity and functioning of the Definitive Care Unit program.

Although this research study is not yet an accomplished fact, there is available descriptive data on the 100 patients who have passed through the DCU since January 1967. All data was obtained from the individual patient's narrative summary and from the entry and discharge questionnaires the patient is asked to complete while in the Definitive Care Unit. This data provides an indication of the results that can be expected from the future followup.

As stated previously, one of the criteria for patient entry into DCU is the anticipation of their medical release from service. With this requirement, it was not surprising that 63 percent of the patients were found to have psychotic diagnoses, 56 percent of which were schizophrenia. One patient was diagnosed as involuntional depression, three as psychotic depression, and three as psychotic reaction unclassified.

In a study of employment characteristics of discharged schizophrenics by Dr. David Brewer and associates, it was found that persons with onset of illness before the age of 25 had disrupted work patterns (2). Thirty-four of the DCU patients diagnosed as schizophrenics were 25 years of age or less. Should the conclusion by Dr. Brewer be universal, we may expect poor vocational adjustment for this group in our followup study.

Of the remaining 37 patients, 22 were given psychoneurotic diagnoses, 8 diagnosed as chronic brain syndromes, and the remaining 7 given various diagnoses. Of the 100 patients, the great majority, 87, were given marked impairment for military duty, 4 given moderate impairment, and 9 minimal impairment.

Sixty-one percent of the patient population arrived at Travis Air Force Base through the air-evac system; 45 were

air-evacuated from outside the Continental United States, and 16 from stateside Air Force installations. Eighteen additional patients were admitted from satellite bases and 21 directly from Travis.

Median age of the patient population was 27.5 years which corresponds closely with the median years of service of 7.3. Other general characteristics of the DCU patients reveal 82 percent to be in either their first period of enlistment or having 12 plus years of service, 85 percent to be Caucasian, and 87 percent to be married or single. Eighty percent had completed high school or higher education. It is quite significant that 46 percent had previous psychiatric contacts not associated with their present hospitalization.

Although it might appear that the Definitive Care Unit program is but one of numerous programs for vocational counseling, we feel it to be more. Group content has indicated the flexibility of the program as it has varied from task-oriented activities, to rehabilitative with the activity being directly related to the patient's particular adjustment problems with a view to helping him decide on a course of action for himself, to psychotherapeutic where the concern was not an uncovering but "more of an attempt to enhance the ego by helping to make the patient's feelings more intelligible to him and acceptable by him" (6).

#### CONCLUSIONS

In retrospect, several things do stand out. Many aspects of the program are in need of refinement, modification, and enlargement. The guest speaker's program, in particular, should be made more active. The primary difficulty incurred here is one of funding and financial provision for guest speakers and consultants. Hopefully, a solution to this will be forthcoming in the form of assistance from NIMH with whom we have recently communicated. In the near future, Occupational Therapy will assume the Hospital Improvement Program. Once this is done, we will also be in a position to enlarge the patient work program to make it more meaningful and productive. Another consideration for improvement is increased patient participation in each phase of the program. It also seems important to make each DCU patient's hospital day approximate as closely as possible a regular nine-hour work day to foster less adjustment to hospital environment and more to civilian routine.

In thinking ahead, it becomes evident that the Definitive Care Unit program is not one unique to the problems of psychiatric patients, but it is a program equally applicable to patient groups throughout the hospital. The Department of Psychiatry is but one department in the hospital complex each of which discharges persons from the Air Force for medical reasons. Conceivably, the DCU program could be expanded to meet the needs of these additional patients. With thousands of airmen being medically separated each year, perhaps this or similar programs could be instituted to meet their needs and to facilitate their transitions to what lies beyond.

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THE EFFICIENCY OF GROUP PSYCHOTHERAPY WITH FIRST-TERM  
AIRMEN AT AN AIR FORCE TECHNICAL TRAINING CENTER

Thomas J. Foley, Jr.

The Department of Psychiatry at Chanute Air Force Base has long dealt with the personnel undergoing technical training at Chanute on a group therapy basis (4, 5). In the summer of 1964 two additional groups were started at Chanute. The purpose of these two new groups was to provide psychologic support to technical training personnel in order that they complete their training program and become a productive entity in the United States Air Force. These groups differed from the other groups at Chanute in that the original groups at Chanute were aimed at rehabilitation of the individual primarily, and retention in the Air Force was highly improbable (4, 5). The purpose of this paper is an attempt to determine if the aims of the group were being met and to what degree. The effectiveness of group therapy as such has been noted before (1, 2, 3, 6). However, it was felt that if we were not achieving our ends in group therapy at a better than chance level, that perhaps a more effective utilization could be made of clinic personnel.

METHOD

From September 1964 through December 1966 there have been 50 graduates of the Airmen's Readjustment Group program at Chanute. This cutoff date was selected because at this point there was a change in format of the group, that is, they began to meet on a twice a week basis as opposed to the original once a week basis. Also, this enabled us to meet the single objective criterion that we had set up as a measure of effectiveness, that is, retention in the Air Force of the individual for at least a year beyond his graduation date from Chanute. This graduation date from Chanute does not in all cases represent the individual's "graduation" from group therapy since some individuals terminated group therapy prior to their graduation from tech school at Chanute. Each of these individuals had been seen individually by a member of the clinic and had voluntarily agreed to enter into the group therapy situation. Each individual had been

referred to the clinic from one of the clinic's referral sources for psychiatric evaluation in relation to retention in the service. These groups were open-ended and continuing. That is, an individual could enter therapy or leave therapy at any time, and there was no set limit as to duration of a particular therapy group. The groups met once a week in either the morning or the afternoon depending on the individual's training program and were of an hour's duration. Group size varied from two to eight; this being totally unstructured and dependent solely upon need. Duration of therapy per individual went from a minimum of four weeks to a maximum of thirty weeks. The group was run by a member of the professional staff, in this case the clinical psychologist, with a co-therapist and one of the clinic technicians available but not always present. The reasoning behind this was that we did not want to tie up two members of the clinic staff, but we did want to be able to maintain the groups in the absence of the group leader.

Since this was not entered into as a research project, certain statistics as regards each individual are not available. For example, approximately one out of five of these individuals received psychologic tests. Thus the I.Q. range on the Shipley Hartford from 95 to 128 has been obtained on only a sample of the group. However, it is felt that the sample is a random sample of this group, and the mean I.Q. of 111 is felt to be representative for the group. The age range of the individuals is from 17 through 24 with 19 representing both the mean and the median. Classification according to AFQT showed a scatter through the first three categories with a mean in Category III. There were no Category IV individuals in this original group. Diagnostically, they ran the gamut of broad psychiatric diagnoses, that is, character and behavior disorder, neurotic, and borderline psychotic. Percentagewise, 86 percent fell into the character and behavior disorder category, 12 percent fell into the neurotic category, and 2 percent or one individual in the borderline psychotic diagnosis.

There was no attempt made to establish a control group since this was begun as a clinical function and not as a research project. For this study then, we have accepted the entire first-term enlistee group within the Air Force as a control group, and we felt that if we reached a level of significance in terms of retention in relation to the over-all Air Force, that a sufficient degree of efficiency would be shown. Since our group was not a representative sample of all first-term enlistees in the Air Force but in actuality

consisted of individuals who were being considered for discharge, further correlation was made on the basis of a 50 percent expectancy of chance of success and failure.

The sole objective criterion used to measure efficiency was retention of the individual in the Air Force at the time of the study with a minimum of one year.

Determination of retention was made through correspondence with the Personnel Research Laboratory at Lackland who furnished us the present duty AFSC and the present grade for each individual as well as date of loss and reason for leaving. The Training Evaluation Section at Chanute also aided us by including the individuals in our group in their sample when sending out questionnaires to evaluate the training program in certain of their technical areas.

The Recruiting Detachment at Chanute furnished us with the figures enabling us to come up with an average of 100,000 new recruits per year. The Personnel Research Lab also furnished us with the percentage of discharge for cause of first-term enlistees for the years 1957 through 1960. There was no available data for the years 1961 through 1966. This percentage had a low of 8.91 percent in 1959 and a high of 16.25 percent in 1957 with an average over these four years of 11.96 percent of first-term enlistees discharged for cause.

These percentages gave us a predictable success and failure ratio and a chi-square test of significance was then applied to our data. Again, since we felt that this group was not a random sample of the overall first-term enlistees, a 50 percent ratio was applied to the chi-square test in relation to our data. The dual null hypothesis in this study is that first, there will be no difference in percentage of discharge for cause between those in the readjustment group and all first-term enlistees, and second, that there will be no difference in percentage of discharge for cause between those in the readjustment group and a chance predictability.

#### RESULTS

The chi-square test of significance was used and five chi squares were determined. Using the data obtained from the Personnel Research Lab at Lackland relative to the percentage of first-term enlistees discharged for cause from 1957 through 1960, we found the lowest rate of 8.91 percent in 1959; the highest rate of 16.25 percent in 1957; and the

most recent rate of 10.14 percent in 1960. The average for these four years was 11.96 percent. All four of these rates were used to determine expected frequencies of success and failure in the various chi square tests. Since the individuals in our readjustment group did not actually represent a cross section of the first-term enlistee, a fifth chi square was obtained using a simple chance expectancy of 50 percent success. The chi square for the lowest rate of discharge was 1.525 which with one degree of freedom gave a .22 level of significance. Chi square for the most recent rate equaled 2.0 reaching a .16 level of significance. Chi square for the average was 3.030 reaching the .065 level of significance. Chi square for the highest rate was 5.357 reaching the .021 level of significance. Using the 50 percent or chance expectancy, a chi square of 42.2 was obtained with a level of significance at the less than .001.

#### DISCUSSION

Since our success ratio as measured by retention in the service beyond one year significantly differs from the success ratio of the first-term enlistee as related to the total Air Force population, it would appear on this statistical basis alone that a high degree of efficiency was achieved through the utilization of group therapy. The fact that this was not a representative sample of the first-term enlistee in the Air Force, but actually a clinic population all of whom were subject to discharge for cause, increased the statistical significance drastically. It may be noted that the only two failures in this program completed twelve and eighteen months Air Force service respectively giving us 100 percent success with the one year retention criterion. Thus both null hypotheses are rejected and the implications for the utilization of group therapy as a means of lessening the overall discharge for cause rate are readily apparent.

However, group therapy cannot be envisioned as a complete answer since not all individuals are amenable to group therapy nor are all individuals who will eventually be discharged for cause referred to a psychiatric facility. As a possible answer to this latter difficulty, the fundamentals of the group process could be applied in the training situation. Currently this is being done at Chanute through the assignment of psychiatric technicians to the training units on a weekly basis.

Since the average cost of an airman in technical training is \$40.00 a day and when on OJT or direct duty assignment it is assumed to average about \$26.00 a day, it would appear that salvaging any of these individuals so that they could complete their tour would be of economic benefit to the Air Force. There is no way of computing when and if an individual would in terms of time pay back the initial investment in his training. However, those individuals discharged for cause represent a total loss of this investment.

Many of these individuals who are discharged for cause, or who are potentially discharge for cause candidates, lack any skill and are thus returned to society in much the same condition they left it. The fact that we can salvage some of these individuals and maintain them in tech schools to obtain a skill is a positive factor in favor of the utilization of any means (in this case group therapy) of effecting this result.

The majority of graduates of the readjustment program have progressed in keeping with regular Air Force careers, and two of the individuals have even achieved the rank of sergeant within a 30-month period in the Air Force. So that perhaps besides doing something for the Air Force, we are also affecting the individual as well.

#### CONCLUSIONS

Based on the findings of this study, the following conclusions seem appropriate and valid:

1. Group therapy with the potential discharge for cause candidate is both plausible and efficient when conducted on a voluntary basis.
2. A monetary savings can be effected for the Air Force by maintaining a man until the completion of his tour by the use of group therapy.
3. While group therapy is not the sole answer, all of its ramifications should be explored, that is, the extension of the psychiatric facility into the training units through the utilization of psychiatric technicians in the training units on a weekly basis.
4. Since the majority of these discharge for cause candidates lack skill, maintaining them through tech school

will give them a skill and a confidence in themselves which is an asset upon their return to civilian life.

5. Utilization of group therapy, at least within the training bases, appears to reduce the overall discharge for cause ratio of first-term enlistees.

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DEVELOPMENT OF A FAMILY THERAPY PROGRAM  
AT AN OVERSEAS PSYCHIATRIC FACILITY

Gary D. Anderson

The current military staff, including one psychiatrist, one psychologist, and one psychiatric social worker, arrived at the 7520 USAF Hospital, South Ruislip Air Base in July 1966. South Ruislip Air Base is located on the outskirts of London and provides service to all Armed Forces personnel and their dependents in the London area. South Ruislip also provides psychiatric services for bases in a 40-60 mile radius of London.

The previous staff at this base had been involved in a variety of cases including a limited number of family and children's cases. Their focus with these family cases, however, had been largely diagnostic in nature; consequently, many of the family-children cases were referred to British clinics. As the new clinic staff began to make contacts with the four local American dependent schools, they found that the principals were expressing interest in referring cases to the clinic and in participating in ongoing psychiatric consultation with the clinic regarding learning and behavior problems. As the new staff was interested in working with family-children cases, they began to explore ways of handling them.

In an informal study of 20 families referred to the previous psychiatric clinic, the new staff noted three important factors: (1) cases followed by the Air Force clinic had improved as much as those followed in British clinics, (2) long waiting lists of up to a year, as well as special requirements such as borough residency, had prevented some families from actually being seen in a British clinic, and (3) high fees for private therapy had caused new hardships to some families.

As a result of these impressions and the discussions with school personnel, the clinic felt it could provide assistance to cases involving family-children problems through direct therapy with families as well as through ongoing consultation with the schools. Since family and children cases

were of particular interest to the psychiatric social worker, the clinic staff agreed that he should provide school consultation and initiate a family therapy program. This paper not only shows the development of this program, but it also describes a useful role a psychiatric social worker may perform in the Air Force.

When a school referred a child to the clinic, the psychiatric social worker focused his first meeting with the parents on understanding the problem from their point of view. Frequently, the parents focused the problem on the child initially expressing the concerns of the child's teacher and by subsequently expressing their own anxieties about their child's deviation from ability or behavioral norms. The parents' criteria were frequently based on the behavior of other children in the family or represented parental expectations of "how a child should act." In some cases, psychologic testing was used as a definitive tool in evaluating the child's capabilities and problem areas.

Although the presenting problem was often the child's undesirable behavior, such as failure to meet academic requirements or misbehavior in the classroom, sessions revealed that parental actions either caused or at least compounded the entire situation. This is exemplified by a 10-year-old girl who would not read out loud during homework sessions even though her mother became quite angry at this. Exploration revealed that although the mother was sitting at the table with her daughter, she found this activity boring and would watch television at the same time. After picking up the double message, the 10-year-old girl lapsed into silence and refused to read the rest of the evening. This child's behavior, regardless of her ability level, was being affected by her parent's behavior.

Therapy, therefore, focused on evaluating the presenting problem and on exploring with the family its relationships and interactions in order to clarify some of the causes of the undesirable behavior. The worker then intervened in the family's interactional system in an attempt to change the family patterns which contributed to the problem.

During the initial four months of the program, emphasis was placed on parental therapy with the child only making clinic contact if psychologic testing was used. However, there was a possibility that the family's interactional patterns might be explored more fully if the child participated in the clinic sessions. The literature indicated that some

psychiatric social workers, such as Captain Donald R. Bardill of Walter Reed General Hospital, treated the family as a unit "to achieve a basic change in the perceptive and interactional areas of the family system" (1). Discussions were also held with Dr. Jerome Miller, Psychiatric Social Worker, Lakenheath Air Base, England. He described his family therapy program which included the child's involvement in therapy sessions.

Because of possible benefits in improved family communication, family sessions began including children six years and older. This also provided a valuable diagnostic tool for the worker. The children remained in the session for varying periods of time, the length depending on the child's tolerance for stress, attention span, and on the nature of the material. Initially, the psychiatric social worker felt uncomfortable about this procedure, fearful that the material discussed might be harmful to the child. It became obvious, however, that the child was familiar with much of the material and was often able to verbalize feelings that resulted in improved communications between family members. This is exemplified by an eight-year-old girl whose constant fighting at home with her ten-year-old sister had left their mother in a constant state of anger. This child admitted, however, that when she and her sister were together and their mother was not near by, the friction between them was nominal. Subsequent information revealed that the mother spent little time with her children, but the fighting always "brought her on the run." Use of this family approach has allowed more information to be gained from sessions, increased the family's intracommunication, and has lessened the need for psychologic testing.

Since its inception, 160 families have been involved in the family therapy program. This consisted of 70 percent resulting from school referrals, 15 percent initiated by the pediatrics clinic or other clinics, and 15 percent self-referrals. There has been no waiting list, and families have been able to begin therapy when they have been most ready for help. Therapy programs have usually been short-term in nature and consist of about four to six one-hour sessions. There has generally been a span of three weeks between sessions to allow time for families to discuss and apply material covered in the sessions.

Developing concurrently with the family therapy program was ongoing school consultation. As previously mentioned, the school principals expressed interest in a consultation program, and this was implemented by monthly visits to the

school by the psychiatric social worker and by frequent phone conversations to discuss referrals. Initially, the contacts were exclusively with the principals, but as rapport was established, interaction with individual teachers became commonplace. Referrals were also received from schools in outlying areas, but for the most part, consultation with them was accomplished by phone.

From the beginning, criteria for referrals was quite flexible with the only ground rule being that the principal make the final school decision as to appropriateness of a referral. This procedure has not only offered a somewhat objective screening device, but it also has kept the principal clearly in charge of his program. Referrals ran the gamut from requests for the evaluation of a learning problem to requests for aid with a classroom behavior problem. Over a period of time, referral guidelines have continued to be flexible, but many cases that once might have been referred are not being dealt with in the schools. Some teachers now handle cases themselves through parental conferences and through consultation with the psychiatric social worker. One focus of consultation has concerned the teachers' varying expectations. Teachers' norms for classroom performance and their ability to tolerate individual deviation vary greatly. If through past cases, for example, it was discovered that a teacher had difficulty lowering expectations for a slower child, discussion might be held with the teacher directly rather than heeding her desire for evaluation of further cases of "slow" children.

Once a family became involved in a therapy program, some feedback was given to the referring agent with much consideration given to confidentiality. In response to teachers' specific questions on learning, some general information gained by psychologic testing was forwarded. In respect to information gained from the family, specifics were not discussed with teachers although teachers were made aware there were home factors influencing the child's behavior. This is exemplified by a recent case in which a child with average abilities was constantly refusing to do his work and acted as a continuous disruptive influence in the class. Family sessions revealed a history of family problems manifested by parents who gave little affection to the child and who could not tolerate any typical ten-year-old behavior. The teacher was conscientious but had become increasingly despondent as her various skills produced little change in this child's behavior. In a follow-up consultation, the teacher was informed that there were severe family problems

and that the child's problems did not reflect on her teaching skills. She was encouraged to offer attention to the child but was reassured that she would not have failed if the child's disruptive behavior made it necessary to set limits.

As an outgrowth of ongoing consultation, the need for a special class for children with severe learning problems was established. The psychiatric clinic provided the main impetus through documentation of need, discussion with local and European school officials, and survey of other special education facilities. A teaching slot was allocated by Headquarters, European Schools, and the class opened with 12 children in March 1967. The psychiatric social worker has been a member of the screening committee and acts as a consultant to the special education teacher.

The family therapy program and related school consultation have been in operation for 1 1/2 years. It is the writer's opinion that the following changes are some of the important ones that have been achieved as an outgrowth of this program. First from the family orientation:

1. Improvement in communications between family members, i.e., increased ability for parents to see situations from each other's viewpoint, from that of their child, and for the child to understand more about his parents.
2. Changing of parental expectations with regard to learning or behavioral functioning so that the child may make strides forward with less stress on him.
3. More confidence on the part of the child as his parents give praise for small improvements in academic work.
4. Increase in parental ability to tolerate individual differences in the child bringing about a reduction of tension in the family.
5. Improvement in marital factors that are contributing to symptoms seen in the child.

Second, from the school orientation:

1. Alteration of school expectations so that a child can develop at his own pace without stresses that impinge on confidence and ability to learn.

2. Reduction of behavior that the school finds undesirable as the family makes changes and the teacher becomes more accepting of individual differences.

3. Reduction of pressure on the teacher who feels she must find the "key" to each child and bring him to a certain level of academic or behavioral functioning so that she is more satisfied with small gains.

4. Reduction of pressure on the teacher as she realizes other people understand her difficulties and will give her help and support.

5. Improvement of teachers' ability to handle situations regarding a child and his parents.

All of the above changes are enhanced by the absence of a waiting list. For without a waiting list, families are able to begin therapy when they are most ready for help, and teachers and principals can be seen when they are most ready for consultation.

This family therapy school consultation program has been developed in the last 18 months by the clinic psychiatric social worker with case consultation readily available from the other clinic staff members, Dr. M. V. Ordiway, Psychiatrist, and Dr. B. L. Carpenter, Clinical Psychologist. Although many aspects of this program may be suited only to this setting, some aspects, such as working with all relevant family members and community resources, might be adapted to other military bases. It is important to note that this paper describes the kind of relatively independent role a psychiatric social worker can fill in the military setting and in the local community.

#### Acknowledgment

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PSYCHIATRIC PRACTICE AND PSYCHOPATHOLOGY  
IN A LARGE AIR FORCE CLINIC

Calvin A. Colarusso

This paper is based on individual evaluation by the author of 250 active duty military personnel who were referred to the Psychiatric Clinic at Travis Air Force Base between May and October 1967. Selection of patients was random, the only criteria being active duty status. Part I is a discussion of the types of patients seen, the referral sources, and the services performed. Clinical problems of the immature airmen, the anti-war - anti-Vietnam protester, and the security policeman are considered in Part II. This section also includes a discussion of evaluation of fitness for Vietnam and homosexuality.

PART I

Forty-six percent of those seen were between the ages of 19 and 21, and 60 percent had been on active duty for less than three years. Fifty-three percent were either airman or airman first class. Thus, approximately one-half were young, low-ranking individuals with little service experience. Eighteen percent were sergeants and 7 percent were officers.

Only two of the eighteen officers seen came voluntarily. Both were neurotic and wanted treatment. The others came involuntarily and were very wary of the interview. They feared for their careers, and in most instances, the result was damaging. Four were referred for evaluation of drinking, three for depression, two for compulsive gambling, one for homosexuality, one for ulcer disease, and four for suitability for flying status. Greenberg considered the same problem and also emphasized the fear of damage to career (4).

Both of the officers who asked for treatment were seen individually, but at best, treatment proved to be very difficult. Scheduling was erratic since both were flying. Due to the press of duty commitments of the officers and lack of treatment time, they were only seen once a week. These were valuable men in whom the Air Force had invested thousands of

dollars, and one was a recent graduate of the Air Force Academy. Their future usefulness to the service could depend on the outcome of the therapy. Although I have no specific answer to the problem, career officers' fear of psychiatry should be neutralized. Greater emphasis should be placed on the outpatient treatment of officers, particularly those with mild neuroses or character problems.

### Referrals

An analysis of referrals demonstrates how our clinic meets the acute psychiatric needs of Travis Air Force Base and serves as a consultation center for the other medical specialties at David Grant USAF Hospital, nine satellite bases, and line organizations. Twenty-two percent of the patients came from the Travis Family Clinic. These were people who either asked for help or were felt to be in need of psychiatric treatment. The remaining 78 percent were predominantly referred for evaluations and recommendations, not therapy. Twelve percent came from other medical specialty services in David Grant Hospital. Twenty-four percent of the referrals were from physicians at satellite bases without psychiatrists. Eighteen percent were from the line. They were predominantly for evaluations on individuals unacceptable to the military.

Often, on line referrals the psychiatrist was asked to supply a character diagnosis and judge impairment for military duty. The diagnosis was sometimes after the fact since in many cases administrative discharge proceedings had already begun. Psychiatric certificates in use during the early part of this study forced the psychiatrist to accept the role of judge and jury which the line expected of him. The certificate made a definite comment on diagnosis and impairment for military duty in each case. Impairment was none, mild, moderate, or marked. Often vital judgments about people's futures were made on the basis of little evidence. Clearly in the absence of gross psychiatric disease, the line officer who observes the individual over an extended period of time is in a better position to determine his ability to function in the military than the psychiatrist.

The new psychiatric certificate, long felt to be needed by our department and instituted following the Forensic Psychiatry Course, OZY 9588, at Brooks Air Force Base in late September 1967, states: "(the patient's name), a member of your organization, was given a psychiatric evaluation on (date) by (doctor's name). This individual is suffering from

no psychiatric condition which would warrant separation from the service by reason of medical disability under the provisions of AFM 35-4 or AFM 160-1. This individual may be considered for any administrative action deemed necessary by command under current directives. (No or A) character and behavior disorder of significance was noted."

There were howls from the squadron commanders and the legal department when this new form was instituted since the decision for administrative separation was now clearly placed in their hands. The psychiatrist was no longer "playing God" and was freer to treat. In 1947 General William Menninger urged that strong emphasis be placed on treatment and warned against using medical channels as a means of disposing of unwanted men. He urged administrative discharge for such individuals (9).

However, in a military setting the function of the psychiatrist as advisor to line personnel is a vital one. This, also, was emphasized by Dr. Menninger (6). We found this need most readily met by frequent telephone conversations. Even under the old system, telephone communication was invaluable because it gave the commander a clearer understanding of the results of the psychiatric evaluation than did the certificate. It also provided the clinic psychiatrist with an opportunity to do some informal teaching about emotional problems.

### Diagnosis

Diagnosis proved to be a difficult and complicated process mainly because it was not only a medical opinion but often interpreted as a definitive judgment affecting the patient's livelihood, family, future, and occasionally even his life (when assignments to Vietnam were being considered). Diagnosis based partly on nonmedical considerations occurred frequently. It is my impression that this is a common practice in the military setting.

I have isolated six factors influencing diagnosis. They are as follows: (1) medical findings, (2) the psychiatrist's conflict over harming people by his diagnosis, (3) pressure from the line, (4) influence of Air Force regulations, (5) sense of obligation of the psychiatrist to Air Force and national needs, and (6) the patient's concept of the psychiatrist as a judge.

The first is self-explanatory. The psychiatrist uses his diagnostic skill and the history available to him to arrive at a diagnosis.

The conflict over harming people by making a diagnosis was prominent. For example, a neurotic diagnosis could easily affect an individual's career. It prompted the consideration of a profile change, and in some instances, this meant hospitalization not indicated from a strictly treatment viewpoint but necessitated by the need for further evaluation to determine fitness for military duty. A diagnosis of alcoholism, when warranted, usually involved a career man with many years of service which meant possible loss of career and retirement benefits. The whole concept of not considering the character disorders including alcoholism as a disease is foreign to most psychiatrist's training and theoretical concepts.

Pressure from the line is applied both to keep people in the service and more frequently, to bring about discharge. Our discussion of line evaluations illustrated this point as will the section on security police problems.

Since many referrals were for determination of AFM 35-99 clearance, humanitarian reassignment, fitness for Vietnam, and ability to continue in specialized programs such as navigator's school, the psychiatrist was again asked to render judgments and opinions on basically nonmedical matters. The diagnosis was a secondary but essential extension of his opinion and judgment.

#### Air Force Interests

Concern for his patient's future was balanced by the psychiatrist's desire to serve the best interests of the Air Force. What determinant should he use in making his decisions about suitability for Vietnam, for flying status, etc.? This will be considered later.

Diagnosis also depends on the information available. History is essential to accurate diagnosis as is the cooperation of the patient. Many patients did not come because they were ill. They did not view the psychiatrist primarily as a physician. He could be instrumental in getting a reassignment, job change, or even a discharge. Diagnosis was sometimes influenced by the patient's active attempts to determine it.

The main conclusion reached is that the psychiatrist, more than his medical colleagues, functions to a large degree outside of a medical framework. Psychiatry and psychiatric diagnosis is utilized in an administrative way. Return of nonmedical decisions to administrative officers would allow the psychiatrist to move closer to standard medical practice and have more time to treat patients. Colonels William Tiffany and William Allerton commented that psychiatry itself may be responsible for part of the dilemma due to having oversold its ability to predict future behavior. "We find ourselves in the position of having to educate the people we serve that we cannot really give scientific answers about future behavior" (10).

### Disposition

Approximately 20 percent of those seen were referred for therapy. The greatest need is for short-term supportive therapy to help the anxious, immature individual adjust to the Air Force. This was successfully accomplished in many instances through group psychotherapy. Most therapy was done by our social workers since the clinic psychiatrist's time was taken up by evaluations and supervision.

## PART II

Some fairly well-defined clinical syndromes began to emerge as data was collected. These will be considered now beginning with immaturity.

Seventeen percent (44) of those seen stood out because of their immaturity. They were referred due to difficulty on the job and inability to adjust to the military. Some came on their own. They could not sleep, felt depressed, didn't like their roommates, were homesick, or wanted another job. Primarily, they all wanted out of the service. Most of these patients were from intact families. They had done well in school, reached a heterosexual adjustment, and stayed within the law. Their primary difficulty was an inability to handle the anxiety generated by being completely away from home for the first time and in an environment which expected them to act like self-sufficient adults.

Prominent personality features were: (1) A high degree of narcissism. "I won't work for my NCO; he doesn't know any more than I do." "Any idiot can do the job I'm doing." Despite a lack of specialized skills or training, they felt they

should be afforded a position commensurate with their self-appraisal. (2) Difficulty in adjusting to external limits and control. The obedience required in a military setting was intolerable. This attitude was felt to be a residue of early infantile feelings of omnipotence which were not tempered by reality and maturation during the developmental years. (3) A poorly developed concept of adult responsibility. If they didn't like the situation they were in, they should be able to change it, i.e., to get out. "I don't like it here. I'm not doing myself any good. Why should I stay in." The ability to delay gratification and tolerate anxiety and unpleasantness was lacking. (4) Intense anxiety and frustration. The need for immediate relief of anxiety impaired judgment. The effects of going AWOL or receiving a dishonorable discharge on future happiness could not be logically considered. (5) The frequent use of threats to influence the psychiatrist into complying with their wishes. "I can't stand to go out on the flight line again. If I do, I'll shoot myself, an airplane, anything." "If suicide is the only way out, suicide it will be."

#### Treatment Procedures

A general pattern of how to treat these young airmen gradually evolved. Although not a combat situation, similar principles appropriately modified were employed (7, 8). Patients were treated promptly and precisely. They were not removed from their units or jobs. Support and encouragement were offered, but it was made clear that they were not felt to be sick and were capable of doing what was asked of them. Removal from the situation through medical channels was not forthcoming.

By accepting their feelings, facilitating ventilation, appealing to the healthy parts of the ego and gently but firmly setting limits, most were able to continue and adjust to the military. The above could usually be accomplished in a few individual sessions, but if more therapy was needed, a group set up specifically to deal with these problems was available.

#### Anti-War - Anti-Vietnam Problems

The active duty military man strongly opposed to the war in Vietnam and vocal about his views has been in the news recently and represents a troublesome problem for the military. Seven such individuals were seen during the course of this study. All were airman or airman first class, 20-22

years of age, and in the service approximately 1 1/2 years. Most had joined the Air Force because of pressure from the draft. They expressed their opposition to the military in general, and Vietnam policy in particular, by going AWOL and refusing to obey orders or wear the uniform.

Three of the seven were severe schizoid personalities. Their developmental pattern showed longstanding difficulties in interpersonal relationships. They had problems in school and with the opposite sex. One had used drugs. Clinically, their disease and not their beliefs stood out. Opposition to the military was felt to be a natural extension of their illness. Unable to handle aggressive feelings and exquisitely sensitive to interpersonal relationships, they were thrust into an environment which forced them to deal with both. One man in particular found the barracks intolerable. Close living and open expression of sexual and aggressive feelings by those around him was more than he could bear.

Those in the second group of four were quite similar to each other but very different from the schizoid individuals. They showed few clinical symptoms. Their backgrounds were unremarkable. High school had gone well, and all had developed a heterosexual pattern. Their anti-war views were a recent conviction arrived at after joining the service and "many months of thought." Picasso's Guernica was referred to by one of the men as symbolizing his feelings about war. The main unconscious dynamic seemed to be rebellion against authority. With a slight smile, one told me of his parent's horror at his viewpoint. One of the men in this group presented a fairly clear picture. His parents were divorced when he was 12 and mother remarried shortly thereafter. Adolescence was a long battle between stepson and stepfather. He left home during high school and only joined the Air Force when pressured by the draft. After becoming a hippie, he felt that the Air Force was "eating at my scul."

Although we may speculate about the dynamics which determine conscious belief, it is not the physician's place to be judgmental about that belief. Consequently, each of the four in the latter group were told that from an Air Force standpoint, they were not ill and should be willing to accept the consequences of their actions since they had broken rules and disobeyed orders. The three schizoid individuals were felt to be emotionally ill, and because of the characterological diagnosis, they were referred to their commanders with a recommendation of administrative discharge. In one instance

this recommendation was not followed, and the man was court-martialed and sentenced to three months of hard labor.

### Fitness for Vietnam

The work of a psychiatrist in the Travis Outpatient Clinic involved other aspects of the war in Vietnam. Ten men were referred specifically to determine psychiatric fitness for assignments there. Emphasis was placed on the following factors in reaching a decision: (1) Previous psychiatric hospitalization, (2) Previous psychiatric diagnosis, (3) Previous psychiatric contact (Six of the ten had been seen previously; three were hospitalized.), and (4) Current clinical psychiatric examination. Three of the ten were acutely disturbed and had to be hospitalized. One represented the "on the ramp" syndrome. Because Travis is the main point of departure for Vietnam, we see many individuals who become upset while waiting to leave. Although only one was observed in the 250 people seen in this study, at least ten others have been seen by our staff during the past year. Several were psychotic and had to be admitted. The pressures and problems which people experience in a large military air terminal such as Travis and McGuire would be a fertile area for future psychiatric study.

To return to our evaluation of fitness for Vietnam, it is apparent from the factors listed that medical considerations were emphasized. Once the evaluation was completed, conservatism was felt to be in the best interest of the individual and the Air Force. If presently ill or on the basis of history and clinical evaluation considered likely to break down, it was recommended that the assignment not be kept (six of ten). The prevention of future breakdowns in Vietnam necessitating transfer and replacement was our goal.

### Security Police Problems

One of the trends which grew out of the experiences of World War II was the use of the psychiatrist to prevent emotional breakdowns (7). The interaction between the psychiatrist and the Strategic Air Command Security Policemen and their supervisors provided an opportunity to practice preventive psychiatry. Eleven security guards assigned to protect C-135s and B-52s were seen. Their job at Travis consists of marching around an airplane for eight hours or more a day. Neither stopping nor conversation with the man guarding the next plane is permitted. At no time during the eight hours do the men leave the flight line. Meals are eaten on the

spot, usually during the two assigned 15 minute break periods. There was no protection from the weather which is hot during the summer and cold, windy, and rainy during the winter. At Travis, approximately 15 airmen are performing this duty 24 hours a day, 365 days a year. Most of them hate it! As one airman interviewed on the flight line described his job, "How would you like to march back and forth in front of an airplane in freezing cold or rain with the temperature dropping to 28° and nobody to talk to and nothing to do for eight hours a day? Sometimes it's 12 hours a day, and this is all you've got to look forward to for months to come."

Their superiors are keenly aware of the men's feelings about their job and work intuitively to help them face the psychologic problems involved.

During the winter of 1966-67, just prior to the onset of this study, many security guards began appearing in the psychiatric clinic. They came on their own, usually without the knowledge of their officers, on referral from the Family Clinic. Their complaints varied. "There is no one to talk to." "I go crazy out there thinking all the time." "I can't stand it; I'm afraid I'm going to shoot up one of those airplanes." "It's ruining my life; I'm tired and rundown when I get home; I never get to see my wife and she cries all the time." "It's my job or my marriage."

The psychiatrists seeing them found no serious disease, empathized with the men's problems, and in a misguided attempt to relieve some of the pressure and prevent accidents on the flight line, disqualified many under AFM 35-99. The practical effect was to make it impossible for the unit to use them on the flight line. Because of the number of men going "35-99" and other pressures on manpower, the squadron situation soon became critical. At this point the commander, understandably angry and frustrated, asked for a conference. He told us about his situation and of the veiled threats he had received from some airmen to transfer them or they would go "35-99." The word was out. The psychiatrist could be talked into a disqualification.

Following this conference and visits to the flight line to gain a first hand appreciation of the problems involved, a new psychiatric approach developed. The main job of the psychiatrist was to differentiate the truly sick individuals from those experiencing situational anxieties. The latter we treated much like the immature youngster seeking to get out of the service. They were allowed to ventilate and

empathized with but were told that no "35-99" disqualification was forthcoming. Some of those previously disqualified were reinstated and according to their commander, turned out to be "excellent troops." As they returned to duty and the weather improved, the number of referrals dropped.

There are definite psychological problems in this job. The main one seems to be tolerance of long periods of isolation alone with one's thoughts. The job produces a form of relative sensory deprivation. Under these circumstances, the ego is handicapped in its attempts to maintain repression of unacceptable, unconscious impulses and affects.

Visits to the flight line revealed some of the ingenious ways used by the healthier men to cope with the problem. It was noted that the men who worked with dogs were rarely heard to complain. Those without dogs had adopted a stray cat which they kept under one of the guard posts. The opportunity to direct libido toward an external object strengthened the ego. One man, after being reassured that I would not think him crazy, told me of a game he used to pass time. "You see those two stones over there. Well, for the last four hours one of them has been the Atlanta Falcons and one the San Francisco 49ers. I kick them from that piece of concrete to the front of the airplane. The one with the least number of kicks wins." This was considered to be a healthy attempt to organize mental activity much as some of the isolated prisoners of war spent hours in the intellectual exercise of adding numbers until astronomical figures were reached. The NCOs and officers had intuitively recognized the need for stimulation and provided it by conversation with the men whenever possible. The enforcement of military discipline also served the same purpose.

The Air Police Squadron, a separate unit, is responsible for guarding security areas but has not had the same problems. The reasons seem apparent. Their men work in teams and ride in vehicles. They leave their areas for meals and toilet breaks as needed. The importance of human contact cannot be overemphasized in understanding the psychological factors at work.

The following suggestions were made in an attempt to make this vital job more palatable and efficient. (1) A one year limit should be set. One of the reasons advanced for the high morale and low incident of psychiatric casualties in Vietnam is the one year tour. An end is always in sight. No one is asked to continue indefinitely. Three years is an

unrealistic end point which cannot be maintained by many of these young men. It seems like forever! (2) No single shift should exceed four hours. (3) An attempt should be made to have the men work in teams. (4) Where possible, vehicles should be used. (5) "If ineffectiveness is to be minimized, it is important that men be selected capable of withstanding the stresses involved in the job (2, 3).

### Homosexuality

Thirteen men were referred for evaluation because of actual or suspected homosexual activity. Of these, seven had a definite pattern of homosexuality, and two had homosexual activity but were primarily heterosexually oriented. One refused to discuss the matter for legal reasons and two denied the accusations.

All of these men recognized that the psychiatrist had the job of putting the "official stamp" on them. Since none came willingly and none came for treatment, they told the psychiatrist what they wanted him to hear. If they wanted out, they admitted to homosexual activities. If they wished to stay in, they denied it. In either event, from a medical viewpoint, the exercise was of little value.

There is not much room within the present concept of homosexuality employed by the Air Force for modern medical and psychiatric understanding.

Marmor is quoted by Alexander and Selesnick as giving the best definition of the homosexual: ". . . one who is motivated in adult life by a definite preferential, exotic attachment to members of the same sex and who usually (but not necessarily) engages in overt sexual acts with them" (1). The emphasis is not on an isolated sexual act but on an emotional preference for the sex. Kinsey reports that one third of adult males have had at least one homosexual experience. All were certainly not confirmed homosexuals (5). Analytic concepts of normal development teach us that homosexual experiences occur frequently in early adolescence and are a part of normal development. In some, a firm masculine identity is still being established in late adolescence. Most incoming airmen fall in this age group. Remnants of the infantile and adolescent struggle with homosexual impulses remain in the unconscious of every adult.

The young airman, still involved in the adolescent struggle with homosexual feelings who is seduced by an active

practicing homosexual, is often treated in the same manner as the confirmed homosexual. If exposed, he is investigated by the OSI and is probably discharged. For example, one of the individuals referred had a confirmed pattern of homosexuality. On several occasions he had actively attempted to seduce his roommate into allowing fellatio to be performed on him but was refused. The roommate eventually submitted and became the passive partner. A discriminating approach to this young man's problem might have saved him considerable psychic trauma and also saved an Air Force career.

If homosexuality were to be treated by the military as a sign of arrested sexual development or emotional illness, then psychiatry could play a meaningful role through effective diagnosis, treatment where indicated, and education and guidance of line officers. If any evidence of overt homosexual play is to continue to be seen as cause for investigation and discharge, then there is really no reason for psychiatry to be involved at all.

#### Conclusion

The aim of this paper was to describe psychiatric practice and the psychopathology seen at the Travis Air Force Base Outpatient Psychiatric Clinic. The clinic is a large complex operation which provides primarily diagnostic and consultative services for Travis Air Force Base, David Grant USAF Hospital, and surrounding bases. Psychiatric practice is closely wedded to administrative function. A plea is made to draw the psychiatrist closer to his medical colleagues and away from administrative and quasi-judicial functions.

The clinical material seen is great and varied. As the work with the security police demonstrated, there is a fertile field for the psychiatrist to engage in clinical research and preventive psychiatry. An excellent use of the psychiatric time in the future would be in these areas.

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## A HUMAN RELATIONS TRAINING PROGRAM AT A USAF HOSPITAL

Vincent Wallen

What is "Human Relations"? Is it a social psychologist's concept for group relationships? Is it a marriage counselor's concept? Is it a legal term to be used only in strikes and in collective bargaining? Is it a management term implying "industrial relations"? Is it a sociologist's phrase depicting race relationships? Is it a political concept dealing with civil rights and school integration? Is it a term to be applied to "hippies" and the "beat generation"? What is "Human Relations"? The concept of human relations may be applied to all of these, some of these, or none of these depending upon the user's perception.

The term "human relations" as it will be employed for the purpose of this paper is perceived as a conjoint concept derived from the disciplines of anthropology, psychology, psychiatry, sociology, and social psychology. Its chief purpose is the development and strengthening of the skills required for the establishment, maintenance, and improvement of interpersonal relationships to be applied to the solving of personal, social, and group conflicts.

During the early 1900's a man by the name of Frederick Taylor was credited with the rediscovery of the human being in the industrial picture. It is reported that he studied the many ways in which men worked and successfully analyzed the muscular motions involved in the accomplishment of work. By careful study he noticed that worker's motions could be increased in efficiency and effect.

It remained, however, for the later researchers in the Hawthorne Works of Western Electric to discover that, in a work situation, the "human machine" is not just so many arms, legs, and muscles. It is also emotions, feelings, hopes, and concerns. And somehow there is a direct and close connection with these less tangible factors and the tangible efforts contributed by the muscles. These experiments, as well as the changing social forces of the times, led to the development of a large amount of concern for "human relations."

It is known that in a democratic society where the stress on individual rights pervades the political, social, and moral climate, employees expect to be treated with dignity and with respect. In situations where employees have felt that management has been lacking in the understanding and appreciation of employee needs and employee problems, the union has been sought as the defender of the worker's individual rights. The rapid rise in growth of unions in America has been attributed to this role of the defender in which many unions have found themselves cast. In addition, it has been reported that many labor relations conflicts have been difficult to solve, not so much because of the issues themselves that have been raised, but because of the feelings that have become attached to them and which are stoutly defended.

Twenty years ago it seemed easy to account for organizational conflict by blaming specific problem behavior on specific individuals and also on groups of individuals. In the light of our present knowledge of the social process today, the simple formula of "firing the troublemaker" is inadequate. The "troublemaker" is now seen as a troubled person, and the difficulty may be attributed in part to the situation in which the person lives or works. Since each person is imbedded in a social matrix of the organization in which he functions, a conflict within the organization could also induce a personal conflict within him. The personal conflict arising from the organizational one might lead to behavior that will deepen the organizational conflict. The employee, for example, may suppress his own feelings or say things that he does not mean thus disrupting communications and the solution to the conflict. It would seem, therefore, appropriate at times to give attention first to the social processes of the institution and secondly to the individual.

It should also be noted, on the other hand, that a conflict in an individual at a significant or high organization level can seriously disrupt the functioning of the given organization. The reaction that is based on a personal conflict can lead to an irrational outcome whether or not there is inherent pathology in the social system. In some instances the social system may allow only certain choices in behavior. A situation or crisis may thus go too far and become irreversible so that an irrational outcome could become the only possible or logical solution.

### CONFLICT ANALYSIS

It is now generally considered unwise and impractical in many circles to consider psychoanalyzing all of the problem individuals in an organization. It is commonly known that every team, section, or department has individuals with unique personal problems or idiosyncrasies. It is known that even when the personality processes deep within the individual may be in question, they nevertheless interact within a framework of his total personality. Rejecting the classical psychoanalytic model, it is now considered adequate and feasible to take the view that all of a person's needs do not have to be made conscious. Instead, a conscious approach can be used side stepping the pathologic areas and dealing instead with a creative element and potentials of his personality. The resulting sense of achievement can be salutary for anyone regardless of any latent or dormant pathology within.

Members of any group which have been together for a long period of time develop certain conflict traps or patterned ways into which new problems will fall. The traps represent unresolved and hidden problems residing in the unconscious and which may be triggered whenever a new issue arises. Thus, a heated conflict could arise over a simple decision as to whether or not a group of patients or a group of employees are to be given time off to attend an outing or a picnic on "company time." Analysis might reveal the presence of strong feeling associated with a bitter conflict that occurred months or years ago but was left unresolved. The original conflict could have been concerned with items such as dining room hours, hospital parking privileges, seniority, or the purchase of technical or administrative equipment. The management or staff alignments established in the original conflict would tend to reemerge on a variety of new issues. In such instances, it would be useful to uncover the original conflict and to present it in the light of the day within the aura of reason, or if the conflict remains unsolved, there will remain a perpetual hindrance to the transaction of any future business. In addition, the longer the conflict persists unnoticed, the more complex will be the ramification of the distorted group process and the more difficult it will be to deal with and to eliminate at a future time.

## HUMAN RELATIONS TECHNICS

Many technics have been developed for improving human relations skills. They vary from that of a formal classroom teaching approach through T-Group (personal sensitivity training) to group therapy following classical psychoanalytic lines.

The first technic usually consists of sending various officials or department members to college seminars or short courses so that they may gain additional skills in management and interpersonal relations and also gain some insight into human behavior in general and in themselves.

Another technic, that of the Group Training Laboratories at Bethel, Maine, trains individuals from a variety of organizations by taking them away from the organizational setting and putting them into T-Groups (training groups). Although the T-Group tends to focus on the conscious side of behavior, it also deals with the unconscious levels of motivation in individuals. The number of hours the T-Groups meet is approximately two hours in the morning and one in the evening. In between there are lectures and demonstrations to implement the technic. The purpose of the T-Group is to have the participants eventually see themselves as they really are and to come in contact with each other on the basis of their real selves. There are three basic problem processes involved: (1) The development of an openness with one another, (2) The diminishing of the authoritarian structure, and (3) The development of technics of confrontation.

Role-playing, one of the commonly employed methods in human relations sensitivity training, can be a useful tool. When carried out consciously it can be moved from a highly structured setting toward one that is unstructured and spontaneous. It is considered to be successful in human relations training when it succeeds in loosening people from patterns of rigid thinking, enables them to see themselves and their associates in a new way, and to see themselves as others see them. The effectiveness of role-playing lies in its ability to change attitudes and behavior because one has "acted out" or "lived" the other person's problem or situation. It may be summated by an old Japanese proverb which says, "Pinch yourself to see how others feel."

The technic of group therapy as applied to human relations training is concerned basically with "working through" of personal conflicts within the group and within each

individual group member. This type of interaction is usually performed by a well-trained and highly experienced group psychotherapist. The training may extend from an "open-ended" existentially oriented group to intensive group psychoanalysis.

#### IMPLEMENTING THE PROGRAM

A number of prevalent deterrents to human relations training may lie within a hospital setting as in other settings. There are those resistances which exist to any new program. Then, there are the unique resistances to human relations training. Experience has shown, for example, that medical staff members may perceive that such a program has no value for them as they know about human relations already and that it may be appropriate only for the lower grade airmen and for the supervisors of the civilian housekeeping staff.

Medical administrative personnel may perceive the program as an implementation for their set aims to be directed specifically towards subordinate personnel with whom they must deal daily. This is usually stated in the form of "getting them to cooperate" implying it is they who must change not I. Experience has also shown that medical corpsmen may be mildly receptive to such a program viewing it sometimes as an interesting presentation but all the while feeling that it is they who have to do all of the bending and changing. It would appear that at times they attempt to confuse the program with the concept that "the patient is always right" and often times view it as another form of moral leadership lectures.

It has been noted also that the civilian housekeeping staff may perceive the human relations training program in terms of possible immediate reward through the change of schedules, wages, and work loads. They may confuse the program with industrial relations and race relations. They may show an eager desire to substitute the program for the routine Civil Service and Wage Board procedures. There are also indications that nurses too may feel that they may know enough about human relations already. Like the administrators, they seem to expect a technic that would "get more cooperation from others."

In order to overcome many of the deterrents to a human relations training program within a medical setting, the

program first must be viewed and planned for in long-range terms. It is generally recommended that: (1) There should be an individual involvement of the human relations trainer or therapist ranging from two to five years, (2) Resistance to the program, both intrinsic and extrinsic, can be overcome by prolonged deep involvement and identification with the program, (3) The selectees, who tend to be more receptive when their perceived status (through participation) is slightly elevated compared with their true status, should be invited to participate through the office of the hospital commander through the medium of an official investigation, (4) At the outset there should be minimal publicity for the program. Knowledge of it may be spread unobtrusively through the graduation of successful cadres of company grade medical and administrative officers, nurses, and NCOs, (5) A reading material packet should be provided for each participant, (6) Audiovisual aids should be used whenever appropriate to the content of the material being presented or discussed, and (7) At least one administrative NCO should be appointed to the administrative function of keeping records, procuring training materials, accomplishing reports, and performing any other ancillary activities.

#### THE MALCOLM GROW PROGRAM

The human relations program as first implemented at the Malcolm Grow USAF Hospital in 1961 was designed to help provide the various staff members with a feeling of identity and to show them clearly where their job fitted into the overall mission. The planned program was deliberately broad in scope and included corpsmen, nurse's aides, receptionists, clerical staff, food service personnel, and members of the custodial staff.

The genesis for the program lay in a number of incidents which occurred despite a very high quality of professional care offered the patients. The careful study of a number of patient complaints revealed that most of them were vague and dealt mainly with emotional reactions to the staff rather than specific complaints of professional mistreatment. An unjudicious comment made by a physician, a negative remark overheard from a nurse, a curt reply to a question asked of the medical technician, an unexplained delay in seeing a physician in the emergency room--these were typical of the types of complaints that were received.

The program as originally planned was geared to the philosophy that all personnel should clearly perceive, regardless of their grade, duties, or level of responsibility, that their individual contribution would add to the psychologic well-being of the patient and to the efficiency of the hospital. The program consisted of a series of lectures and group discussions geared to the various echelons of the hospital staff. The receptionists, for example, would train separately as would the ward technicians and the emergency room personnel. There were monthly meetings with group discussions of problem areas for both the ward, noncommissioned officers, and the clinic personnel. These meetings included the Hospital Commander, the Director of Professional Services, the Hospital Administrator, the staff psychologist, and on occasion, guest speakers. The formal talks emphasized preventive measures and technics of dealing with stress situations rather than with criticisms of past mistakes. On occasion, films were shown depicting various aspects of group dynamics. Role-playing was also employed demonstrating both existing and potential conflict areas. Recognizing the need for developing the art of telephonic communication and conversation, a course by the Bell Telephone Company, was added to the program. Emergency room personnel, for example, were instructed in the art of good telephone manners and on the principle of giving a positive answer. They were also instructed that if they were unable to satisfy an individual, the call should then be referred to the appropriate nurse on duty, the administrative officer, or to the medical officer of the day.

At a later date the responsibilities for the implementation of the program was transferred to another staff psychologist whose professional orientation towards "human relations training" lay in a classical psychoanalytic model. The individual group members that were selected for training were first nominated by the Hospital Commander. The members of the group were given the basic contract, "You are here by order of the Hospital Commander and not by election." I am the appointed leader, and this is the way the situation will have to be." The members were told at the beginning that the goals would be twofold. The first would be to find a problem that all would agree is a valuable one in which to work, and secondly to work out the problem to a reasonable point and then to terminate. It was related to the group members that each meeting would be a unique occurrence and that group members should not inquire as to what other groups have done. The group met for twelve individual sessions lasting from 1045 to 1200 hours. Attendance was mandatory

and was taken at each meeting. With the departure of the staff psychologist from active military service, the program was terminated temporarily.

At the present time the human relations training program is under close supervision of the Department of Psychiatry. A new training course was initiated on 13 September 1967. The training group consisted of a large cross section of nurses, the Medical Service Corps, Biomedical Science Corps, and officers in company grades of 2nd lieutenant through captain. The content of the course was directed towards the developing of skills and leadership, discipline, morale, and the understanding of group dynamics and group processes. The methods of instruction employed consisted of a series of lectures and discussions with the adjunctive use of training aids such as psychologic training films, exercises at self-assessment involving the administration, scoring, and interpreting of various self-administering tests, and self-ratings. The films which were shown and discussed were "Focus on Behavior--Man the Social Animal," and Maslow's recent film entitled "Actualization Therapy." The majority of the training sessions were initiated each with a brief lecture followed by a discussion. Sample topics were: "Personality Theory and Social Adjustment," "The Role of Motivation and Work Performance," and "Self-Actualization as a Goal in Emotional, Social, and Occupational Achievement." Several of the topics which were discussed were: "Dealing with a Problem Employee," "Characteristics of a Good Leader," and "Employee Morale." Supplementary aids that were employed for personal introspection consisted of a self-administering test of intelligence, Allport's Scale of Values, and the Mooney Problem Check List.

One of the primary objectives of this particular training course was to reestablish the continuity of the human relations training program and reestablish good will and salutary public relations. The primary objectives of the overall program were to develop: (1) Better understanding of individual and group relationships, (2) Increase self-understanding, and (3) The learning of more effective ways in dealing with and in solving work and personal problems. On 14 November 1967 the first training course was concluded and certificates were awarded to the trainees.

### CONCLUSIONS

The positive results of the human relations program at the Malcolm Grow USAF Hospital have been evident from the time of its inception. The increase in efficiency and the reduction in patient complaints have been the immediate tangible results. More important, however, has been the establishment of a feeling that each and every person is a unique individual and has a personal contribution that he can make to the accomplishment of the overall medical mission, and that regardless of rank, title, or status, he may take a personal pride in his job as a needed and respected staff member.

In a modern and ever-changing democratic society with its stress on human rights and its concerns with effective organized human behavior, it is imperative that both supervisor and employee learn to recognize the rights and responsibilities of each other and to further develop within themselves a clearer self-perception of one's self, his roles, and functions. To serve this need and to facilitate self-understanding, openness, mutual trust, and mutual support, a number of training methods have been developed. They vary from the formal classroom lecture technic to the T-Group Sensitivity Training method to the intensive analytical group approach. The human relations training program which is a continuing requirement at the Malcolm Grow USAF Hospital would appear to be one of the effective ways to achieve such objectives.

## DETERMINISM VERSUS FREE WILL IN HUMAN BEHAVIOR

Maurice R. Seaquist

A determinist views all human behavior as having been caused. It doesn't matter how small or insignificant the bit of behavior may be, it is perceived as having determinants which produced it. For example, if a person has a dream in which he is being chased by a man who has a knife in his right hand, a determinist maintains that some thing, or some things, determined that it was a knife that he was carrying rather than a club, or gun, or a bouquet of flowers. Also, there were determinants which made the pursuer a man rather than a woman and so on.

As behavior scientists, we concern ourselves with looking for the determinants of maladaptive or destructive behavior and, from time to time, the courts ask us to make judgment concerning the responsibility, or degree of responsibility, of a particular individual for a particular act.

The question we need to ask ourselves is this. Are we full time, card-carrying determinists? If so, then we must view all human beings as extremely complex robots who have only an illusion of freedom to make choices. Then there are no good guys, nor bad guys, nor heroes, or villains. There are only a vast combination of determinants which produce constructive or destructive behavior in a particular individual at a specific moment.

What are the ramifications of determinism and what special problems does it present for the behavior scientist? One of the first questions which needs to be answered is how do we know when we have found all the determinants which are pertinent for a given bit of behavior? What criteria do we use to evaluate whether an event in a person's life is a major or minor determinant? Do small, minor, obscure events in a person's life accumulate and eventually generate the power of causation of one single major obvious event? Can ten, or a hundred, or a thousand small determinants become equivalent in significance to one major determinant? Can small positive determinants neutralize the power of causation of one major negative determinant and vice versa? Do ten

combining determinants which occur in a twenty-four hour period have more or less causation power than ten combining determinants which occur over a period of one week? Do repressed events have more or less power than events which are not repressed? Do repressed events combine with conscious events in forming a chain of causation? Can we ignore small determinants and how they combine, or is it true in the field of human behavior that "for the lack of a nail a war can be lost"?

Suppose one of us goes into a store and makes a purchase, and on the way out, we see out of the corner of our eye a picture of Freud on a magazine cover. Our interest is aroused sufficiently so that we stop to read the caption under the picture. Suppose this bit of behavior delays us from leaving the store by twenty seconds. We arrive at our car twenty seconds later, start the engine twenty seconds later, and suppose we drive all day long. Ten hours later another car comes out of a side street at a high speed, hits our car broadside, and kills us. If we had arrived there twenty seconds earlier, we would have been safely past that intersection. Was our interest in Freud ten hours earlier a determinant in our death? If this is true, how small does a determinant have to be before it lacks significance in a chain of causation? Is life really this precarious, and are we at the mercy of such small, capricious determinants? If combinations of small determinants can play such a potent role in the scheme of things, how can we ignore them? On the other hand, the number of permutations of these combinations is so great, how can we ever hope to accurately analyze them?

The courts attempt to determine whether a man is responsible for a crime, and at times they ask us to render an opinion. If we are complete determinists, how can we assess responsibility for any behavior? If Adolf Hitler had lived to face an international court, how would we have assessed his responsibility for his life? We ask ourselves whether Hitler had any responsibility for the choice of his parents, where he was born, or the point of time in history that he evolved? Did he have any choice in the few trillion cells that composed his body? Yet, these determined whether he was black or white, male or female, tall or short, intelligent or stupid, and so on. We know he could not choose his heredity or his intrauterine life. At birth he could see, hear, smell, taste, and feel, and react in some way to what he perceived from second to second. These reactions resulted from a continuously increasing number of determinants, and they combined to produce an awesome complexity of causation.

We must ask ourselves, at what second did this organism become responsible for its behavior? Can we say that if we had had all of these determinants ourselves that we would not have ended up in a bunker in East Berlin? If not us, why not? At what second would we have behaved differently than he did? And, if so, why? Would it be because we have a pocket of goodness in us that he didn't have? Where did this pocket come from, and did we do anything to earn it? If so, what caused us to earn it and him not to earn it? And if we did not earn it, how can we take any credit for it? Unless we can say with some certainty that we would not have lived the life of Hitler, how can we assign the responsibility to him? Are we going to claim that if he had been born a Jew, that he still would have destroyed six million Jews? How much difference would it have made if he had been born on a farm in Alliance, Nebraska? Would he still have lived a destructive life? Or, what if he had had yours or my mother and father?

As behavior scientists, we may be limited at this point in our development to simply stating that all behavior which occurs must have had adequate and sufficient determinants even though we may not be able to perceive enough of these determinants to always understand how the behavior was produced. We then are saying that a person with a character disorder who murders has just as adequate and sufficient determinants producing his behavior as does a person who is psychotic. That is, the person with a character disorder did not choose his category of maladaptive behavior any more than the psychotic chose his. To execute one is just as senseless as executing the other.

At this point, members of the legal profession may be quite unhappy with us. They may say that they have asked us to assess responsibility and that we have answered that responsibility cannot be assessed. Judges and lawyers probably would not take kindly to our informing them that all these years they have been asking the wrong question. That instead of trying to determine if the defendant is responsible for his crime, the question they should have been asking is "What determinants caused this man to behave in a destructive fashion?" Also, what determinants will cause him not to behave destructively again, and what negative influences were there in the society which produced him, and what can be done to eliminate these factors so that future citizens will not be exposed to these negative influences? We are not saying the legal system should not punish some criminals in certain ways as punishment may act as a beneficial determinant for some

individuals. We are not saying that the criminals should not be isolated from society, until, and unless their destructive behavior can be eliminated.

If we persist in our position as determinists, we are certain to make religious leaders uncomfortable also. They are going to point out that religions have been based on the concept of personal responsibility since their beginnings. They will ask, what happens to our concepts such as sin, guilt, vengeance, forgiveness, and the good guys going to heaven and the bad guys going to hell? From your deterministic position, it follows that we did not really choose our particular brand of religion at all but that such determinants as the religion of our parents, and where we were born, did our choosing for us. Don't you know that even the Bill of Rights guarantees the freedom of choice of religion? What kind of shape do you think the world would be in now if it were not for religions?

We behavior scientists, after being confronted by law and religion, may find that being full time determinists is not much fun. Since there is such widespread opposition to the concept of complete determinism, perhaps we were wrong in taking this position in the first place and we should abandon it for another position.

Suppose we become only part-time determinists. Then we can say that as behavior scientists, we have learned that only some behavior is completely determined, other behavior only partially determined, and some other behavior completely free of determinants. That is, suppose we embrace the concept of a free will. Is this a more comfortable concept, and what are the ramifications and problems of this position?

First of all, we note that our new position has brought back the concept of personal responsibility. Now it again makes sense to think in terms of good guys and bad guys, and we are free to cheer the heroes and hiss the villains. We are also free to take revenge upon the villains and keep a clear conscience in the process as we are destroying evil. We have also gained back our feelings of superiority over the Adolf Hitlers and the other evil people. In addition to hating individuals, we can feel anger and hate toward whole countries and their ideologies to the point of going to war against them and destroying them, secure in the knowledge that God is on our side.

As behavior scientists on familiar grounds, we feel more comfortable and our problems are simplified. Or, are they? It is true that we can now go to court and render an opinion concerning a defendant's responsibility. Since we have the concept of free will and since we are experts in the field of human behavior, it is entirely logical that we perform this function. But before we settle back in the witness chair, let us ask ourselves how much we know about free will. When does it operate and when doesn't it operate? Do some people have more of it than others do? Can a person develop it in themselves? Can they somehow earn it? Can it be measured? What questions do we ask or what psychologic tests do we administer to take the measurements of free will? How, indeed, can we ever measure something which by its own definition is free and above determinants? It seems as behavior scientists we are unique. Out of all the sciences, ours is the only one which has phenomena free of determinants. Before we give our testimony, let us ask ourselves just how expert a witness can we be. Let us note that the prosecutor has lined up just as many behavior scientists as the defense attorney. How can this be? Or, rather, how can this not be? We might ask ourselves, how did we get into this arena where we must contest with our fellow experts? It appears that we have experienced as much difficulty adjusting to the legal system on its terms as it would have adjusting to us if we were full time determinists.

Another problem with embracing free will is that the concept lends itself so readily to allowing we humans to hate each other. It is the person who is evil rather than the determinants since the person is fully responsible for his behavior. It also allows us to have the same feelings toward ourselves. Instead of some inborn Thanatos causing man to be against himself and others, we need to ask to what extent the concept of personal culpability is responsible for such widespread destructiveness and if it is, how can we feel comfortable in embracing it?

Twenty-one years ago, Dr. Chisholm, fresh from World War II, wrote a paper in which he reviewed how civilization throughout time has fought devastating wars and created untold suffering. In seeking the determinants, he presented the following statement:

"For a cause we must seek some consistent thread running through the weave of all civilizations we have known, and preventing the development of all, or almost all people, to a state

of true maturity. What basic psychologic distortion can be found in every civilization of which we know anything? It must be a force which discourages the ability to see and acknowledge patent facts, which prevents the rational use of intelligence, which teaches or encourages the ability to dissociate and to believe contrary to and in spite of clear evidence, which produces inferiority, guilt and fear, which makes controlling other people's personal behavior emotionally necessary, which encourages prejudice and the inability to see, understand, and sympathize with other people's points of view. Is there any force so potent and so pervasive that it can do all these things in all civilizations? There is--just one. The only lowest common denominator of all civilizations and the only psychologic force capable of producing these perversions is morality, the concept of right and wrong, the poison long ago described and warned against as 'the fruit of the tree of the knowledge of good and evil.'

In the old Hebrew story, God warns the first man and woman to have nothing to do with good and evil. We have been very slow to re-discover this truth and to recognize the unnecessary and artificially imposed inferiority, guilt and fear, commonly known as sin, under which we have almost all labored and which produces so much of the social maladjustment and unhappiness in the world. For many generations we have bowed our necks to the yoke of the conviction of sin. We have swallowed all manner of poisonous certainties fed us by our parents, our Sunday and day school teachers, our politicians, our priests, our newspapers and others with a vested interest in controlling us. 'Thou shalt become as Gods, knowing good and evil,' good and evil with which to keep children under control, with which to prevent free thinking, with which to impose local and familial and national loyalties, and which to bind children to their glorious intellectual heritage . . . The results, the inevitable results, are frustration, inferiority, neurosis, and inability to enjoy living, to reason clearly, or to make a world fit to live in (1)."

Harry Stack Sullivan echoed Chisholm's views when he stated that in his experience, ". . . there is imminent in human personality a striving toward the way of life that is not destructive to others. It tells me that man would live at peace had he ever had the chance to be free of that 'slavish acceptance of the doctrines which each generation,' to quote Abe Fortas, 'is supposed to accept from its predecessors like a burial urn, and to pass on untouched and unexamined to its successors (2).'"

These views were expressed 21 years ago. Since that time a new generation of our sons has grown up to fight again in still two more wars. Law and religion are still pulling people in different directions. What is religiously right may be legally wrong, and what is legally right may be religiously wrong. Whether sin or crime, both evoke condemnation and revenge.

Must we wait for some future period of enlightenment before there can be a rapprochement among law, religion, and the behavior sciences? When will we be ready to provide leadership toward this social progress?

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CONCEPTUALIZATION AS REFLECTED IN SOCIAL PERCEPTION BEHAVIOR:  
A PRELIMINARY REPORT

Eric C. Theiner

The term "conceptualization," or as used experimentally in recent psychologic literature, "conceptual complexity," has been employed to characterize several different forms of behavior. Because all of the definitions offered for this term have been empirical or operational, and because all of these operations have differed, it is not possible at this point to describe conceptualization by means of any single, all-embracing behavioral definition. In the most general terms, however, it might be said that a person with a relatively high degree of "conceptual complexity" might be expected to demonstrate a great deal of subtlety and precision in classifying or coding his experiences; he would generally avoid stereotypes in his thinking and could make and preserve discriminations at an optimal level in both interpersonal and impersonal transactions.

While a number of studies have attempted to develop operational definitions of conceptualization, there has been only a minimal attention directed toward examining relations between conceptual categories and actual social behavior. This, then, is the question to which this present research is directed. That is, are differences in the complexity with which one classifies information related to his perception of social interaction settings?

Social Perception

The few studies touching upon the relation between conceptual behavior and social perception have typically been concerned with establishing the validity of certain conceptual categories. Social perception research, on the other hand, has generally been focused on the accuracy of one's perception in an interpersonal situation. Differences in the ability to perceive others accurately has been associated with a number of cognitive and affective dimensions, e.g., "defensive orientation," "psychologic adjustment," the "authoritarian syndrome," and "judge-object characteristics" (9).

Naugle discussed the need to develop categories to describe the possible approaches by which an observer might deal with a given interpersonal situation. He attempted to carry out a study in which the "characteristic" ways in which a person perceives, as suggested by Inferential Set Theory (4), could be predicted from his degree of "cognitive complexity." While his results were not conclusive, the failures may have been due to methodological shortcomings rather than theoretical faults.

#### Inferential Set Theory

Inferential Set refers to a system for categorizing the anlagen or predisposing sets employed by an individual perceiving a social situation. The term was first used by Jones and Thibaut (4) to describe the modes of responding to interpersonal interactions aroused within an individual. The three approaches this term implies are as follows:

1. The value-maintenance set (VM) is characterized by an egocentric, evaluative search for personal gratification. Jones and Thibaut summarized this set by the question, "What is he doing to me or for me that makes me want to approach or avoid him?" (4). The purpose is the facilitation of personal goal attainment.

2. The situation-matching set (SM) is characterized by the application of social sanctions--that is, by the perceiver's concern as to the appropriateness of the stimulus person's behavior in terms of the generalized norms which he considers to be applicable in the given behavior setting.

3. The causal-genetic set (CG) is characterized by a concern over the causes of another person's behavior. Jones and Thibaut summarized this set by the question, "How did he get the way he is?" or, "What features in his past experiences cause him to behave as he now does?" (4). The purpose is the deterministic analysis of personality.

Put another way:

The value-maintenance set, for example, clearly involves the attribution of substantial cause to the other actor who is thereby seen as in some personal sense responsible for abetting or thwarting the perceiver. The perceiver, in a causal-genetic set, conceives an act as emanating from a personality which has complex

origins in a variety of social, physical, and biological determinants. In the situation-matching set, the causal locus of behavior is more or less irrelevant to the inference process, or at least, the extent to which causation is phenomenally personalized will depend on other conditions (4).

It is noteworthy that while both the value-maintenance and situation-matching sets involve comparisons with a standard (a personal, idiosyncratic one in the case of the former, and a generalized, normative one in the case of the latter), the causal-genetic set does not. Rather, its focus is on the pertinent historical and situational features that underlie the behavior.

Jones and Thibaut provided an example of how the different inferential sets might be operative within the same situation:

Let us assume that the stimulus person (B) is a suspect in a criminal case. X, who is a spectator in the trial courtroom, looks at B and says to himself, "I wouldn't want to meet him in a dark alley," or "He looks like a nice, clean-cut chap--the kind of person I'd like to get to know." Y, on the other hand, is a court-appointed psychiatrist who is preoccupied with assessing B's sanity and his responsibility for the crime allegedly committed. Y might say to himself, "The utter lack of motive for this crime makes me suspect the man's sanity," or "The instability of this man's home environment is clearly a crucial factor behind his impulsiveness and irrationality." Z, finally, is a member of the jury. As he looks at B, he is primarily concerned with B's legal innocence or guilt--deciding whether this action violates one law for another. Needless to say, in terms of the foregoing descriptions, we would say that the value-maintenance set is dominant with X, the causal-genetic set with Y, and the situation-matching with Z (4).

While the simplicity and straightforwardness of the notion of inferential sets are appealing, the reduction of these terms from speculative statements to empirical definitions has proven difficult. Naugle offered a number of criticisms of previous attempts. For one, response measures

have uniformly been ratings on trait scales. The question arising concerns the specific relevance of these response dimensions to inferential sets as opposed to their more general relevance to the experimental situation. Thus, the specific trait scales might be irrelevant for the assessed rating, as for example, the use of terms such as "honest," "frank," and "deceitful" to describe an individual for an observer who had assumed a causal-genetic set.

Studies on the inferential sets have characteristically used the technic of set induction. That is, the Ss were provided information about a particular social situation and, based on this information, were presumed to have adopted certain sets. Naugle pointed out, however, that the Ss varying responses to the differential information might have reflected, in actuality, only the ability to recognize the attributes of an assigned role and not the adequacy of the induction. The only satisfactory indicator that appropriate set arousal had occurred would have been evidence of differential perception.

Naugle sought to handle these problems by using the inferential sets themselves as response variables. He noted:

This should permit a more direct investigation of interrelationships involving situational and interpersonal features. By defining and controlling situational context, its interactive influence could be clearly reflected. Until more is known about these relationships, attempts to induce sets seem premature. At this level of investigation, it seems more important to view inferential set expression as a function of both interaction context and dispositional features (9).

The explicit assumption concerning socialization and the several inferential sets has been stated by Jones and Thibaut.

. . . much of socialization involves the gradual substitution of causal-genetic and situation-matching criteria for more primitive value-maintenance standards (4).

Naugle gave this hypothesis more explicit form.

. . . the direction of change from least mature should be as follows: value-maintenance, situation-matching, causal-genetic (9).

The present research hypothesis followed Jones and Thibaut's view that socialization proceeds as follows: value-maintenance, situation-matching, and/or causal-genetic. There may well be a three stage progression as suggested by Naugle, but this notion lacked sufficient experimental support for introduction into the present investigation.

### Conceptual Complexity

There are available several different operational definitions of cognitive complexity. Since all have variant measurement properties from one another, the only satisfactory method for examining the relationship of the construct of cognitive complexity to inferential set behavior is to employ as many of the operational statements of the term as possible in the examination.

As a second parameter, the different operational forms differ even with regard to the nature of the actual stimuli employed, that is, whether such stimuli are "impersonal" or "interpersonal." The definitions developed by Bieri (1), Mayo (8), and Tuckman (14) have always used people (interpersonal) as stimulus referents, while those of Kahn (5) and McGaughran (7) have typically used objects (impersonal). While the choice of one or the other kind of referent has usually been described as deliberate, the reasons for this choice have not always been clear. That is, each researcher has implied that use of the "other" kind of referent would lead to a different performance (12).

The tactic presently selected to handle this matter was to develop, where possible, both impersonal and interpersonal forms for each of several main technics for defining "conceptual complexity" and to relate both separately to inferential set behavior. Operational definitions with alternate forms were thus provided for the Bieri and Mayo measures with the third measure (Tuckman) not capable of such treatment. Tuckman calls his construct "integrative complexity" rather than "cognitive complexity," although there is little question that he seeks to tap the same construct defined by the latter term. Tuckman uses four "systems" to express degrees of complexity with System I being "low" and System IV being "high," whereas the others speak of a dimension.

## PROCEDURE

### Operational Measures

Bieri's technic consists of presenting the subject with a list of ten names of significant role figures. He then presents a list of ten constructs such as "adjusted-maladjusted" and asks the S to decide to what extent each of the ten constructs (on a 1 to 6 scale of magnitude) applies to each role figure. The more differentiated the application of the constructs, the more cognitively complex is the S. Bieri's is an interpersonal form, i.e., it uses people as the main stimulus referent. The impersonal form of this measure was obtained by simply substituting stimulus objects for the role figures.

Mayo's technic is similar to Bieri's in that she provides the S with a list of names of significant role figures, although she presents only three figures at a time. Her instructions to the S are to give as many ways as possible in which two of the figures are alike but different from the third. The number of such constructs which the S can produce in a given time period constitutes the index of cognitive complexity. The impersonal modification, as with the Bieri, simply required the substitution of stimulus objects for role figures.

Tuckman's approach consists of presenting the S with each of six hypothetical interpersonal situations. He then requests that the S select one of four possible forced-choice responses to the given situation. These responses presumably differ in the number of alternative solutions offered; thus, Tuckman defines the cognitively ("integratively") complex individual as the one who characteristically selects the response incorporating multiple alternative solutions. As noted, he calls his "low" complex person a System I person and his "high" complex person a System IV person with Systems II and III persons describing intermediate positions. Since his operational definition is intrinsically tied to the perception of social, interpersonal situations, no impersonal form of his technic could be developed.

The measure of inferential set consisted of five tape-recorded dialogues presenting either "two students," or a "student," or a "resident advisor" (dorm counselor) in conversation selected on the basis of presumed relevance for the present Ss.

The dialogues have been described as follows:

Minimal Information Dialogue I (content-free discussion). The "actors" are presented as two students working on a problem which is not specified. Their conversation consists only of remarks focused on achieving a "solution" to the task. Reference to specific personal characteristics or behavior styles is minimal (theoretically nonexistent, but it cannot be rigorously maintained that such a goal can be achieved). The "tone" of their conversation remains even and on a cooperative level (9).

Low Situational Complexity Dialogue II (hostile discussion). The "actors" are represented as two students engaged in a discussion regarding the respective merits of a "discussion-oriented" versus a "lecture-oriented" class with each taking a different viewpoint. One "actor" (the stimulus person) becomes increasingly hostile towards the other "actor" in his verbal expression; the other "actor" does not become verbally hostile (9).

Dialogue III (non-hostile discussion). The "actors" are represented as two students engaged in a discussion regarding the respective merits of "pay television" with each taking a different viewpoint. The conversational tone remains even, and each "actor" expresses friendly acceptance of the other's point of view without abandoning his initial position (9).

Moderate Situational Complexity Dialogue IV (academic problem). The "actors" are represented as a "student" (stimulus person) and a "resident advisor" engaged in conversation around the presentation of an academic problem by the stimulus person. The "resident advisor" maintains a fairly standard operating procedure in eliciting the stimulus person's story (9).

High Situational Complexity Dialogue V (non-hostile emotional problem). The "actors" are represented as a student (stimulus person) and a resident advisor engaged in conversation around the presentation of an emotional problem by the

stimulus person. The resident advisor maintains a fairly standard operating procedure in eliciting the stimulus person's story (9).

Each S in the experimental procedure was instructed to give forty "free description" responses, eight per dialogue, reflecting his reaction to the stimulus person.

The original intention had been to score each of the forty responses according to the three inferential set categories as defined operationally by Naugle. Yet, while these three categories were clearly differentiated in theory, their differentiation in speech was by no means as straightforward. To illustrate, the response "he is lazy" rather clearly encompasses both VM and SM components. Taken as an epithet, it clearly reflects a VM set. Taken as a description of behavior in a normative setting, it reflects, just as clearly, a SM set. This multiple applicability to several possible sets was found in a substantive number of responses obtained in the present sample.

The presently selected solution to this problem was to develop additional refinements within the SM category. That is, the SM classification was broken into four additional subgroups: Description (DES), Situation Matching-Ability (SMA), Situation Matching-Behavior (SMB), and Situation Matching-Dynamic (SMD). Thus, the final scoring employed seven categories: VM, DES, SMA, SMB, SMD, and CG with the seventh being Not Elsewhere Classified (NEC) which was used only when none of the other six categories was deemed applicable. The DES category, which only described the perceived interaction rather than matching its appropriateness in the given context, was felt not to be a true SM response. Both it and the NEC category were therefore excluded from the final analysis.

Two raters, scoring the response sheets "blind," achieved perfect agreement on 69 percent of the cases. Disagreement within one category was achieved in another 17.5 percent. The fact that 86.5 percent of the responses were capable of such consistency was taken to indicate that adequate interscorer agreement had been achieved. The final categorization given each item was achieved by consensus.

Besides the indices described above, each S's age, hours of college credit, academic year, verbal fluency, and manifest achievement were also introduced as experimental variables. These variables required controlled presentation

because each had previously been hypothesized as affecting conceptualization.

### Subjects

The sample consisted of 60 female college students with an average age of 21.43 years, S.D. = 6.06 years. Ninety-two percent of the Ss were between 18 and 28 years of age with the preponderance (71 percent) being single. The average number of hours of college credit completed was 41.80, S.D. = 30.87. All Ss were considered as doing adequate school work as defined by their enrollment in the classes described. The decision to limit the sample solely to females was to reduce uncontrolled variation due to sex differences; such variation has previously been shown to affect conceptualization (13).

### Experimental Manipulation

A total of 21 scored variables were employed including square root transformations for the Bierl measures. The extent of relationship between the individual measures of conceptual behavior and the inferential set categories was tested by use of Pearson's  $r$  (2, 3).

## RESULTS

Table I shows the means and standard deviations of the measures used in the analysis. Three of the response variables (VM, DES, and CG) have greater standard deviations than means where a minimum measurement point was zero. The assumption of normality is not tenable in these instances, and individual non-parametric analyses were additionally performed on these scores.

Computation of  $r$  between the control values of Age, Hours of College Credit, Scholastic Year, Verbal Fluency and Manifest Achievement, and the experimental measures yielded three significant intercorrelations (two in excess of .05; one in excess of .01) by a two-tailed approximation of  $t$ , with  $df = 58$ . This proportion is approximately equal to alpha, and these significances were attributed according to random variation.

The major hypothesis was composed of four statements. First, an inverse correlation was predicted between the lesser degree of socialization as defined by use of the

TABLE I

Means and standard deviations of the experimental variables

Variable	M	SD
Age	21.43	6.06
Hours of College Credit Completed	41.80	30.87
Year Enrolled	1.97	1.06
Verbal Fluency	10.45	3.61
Manifest Achievement	13.02	4.82
Bieri Interpersonal Score	150.87	45.64
Bieri Interpersonal Square Root Transformation	121.67	17.61
Bieri Impersonal Score	129.52	41.09
Bieri Impersonal Square Root Transformation	112.60	16.40
Mayo Interpersonal Score	37.20	9.51
Mayo Impersonal Score	32.13	7.98
Tuckman System I Score	7.80	2.24
Tuckman System II Score	7.35	2.32
Tuckman System III Score	9.65	2.13
Tuckman System IV Score	11.20	1.93
Value-Maintenance Score	3.65	4.17
Description Score	2.03	2.37
Situation Matching-Behavior Score	20.42	5.00
Situation Matching-Ability Score	2.35	1.01
Situation Matching-Dynamic Score	9.28	3.95
Causal-Genetic Score	1.63	2.04

value-maintenance set and a high degree of cognitive complexity as defined by the Bieri, Mayo, and Tuckman System IV scores. Conversely, a direct correlation was predicted between the VM set and Tuckman System I scores.

As a corollary, it was proposed that a direct correlation existed between the higher degree of socialization as defined by use of the situation-matching (i.e., SMA, SMB, and SMD) and causal-genetic inferential sets, and high degree of cognitive complexity as defined by the Bieri, Mayo, and Tuckman System IV scores. Finally, an inverse correlation was predicted between the SM and CG sets and Tuckman System I scores.

Table II shows the intercorrelations between the conceptual complexity measures and the inferential set categories.

Four correlations are significant (two at  $p < .01$ , and two at  $p < .05$ ), which, while greater than that which can be accounted for by alpha error, is minimal support for the overall hypotheses.

There is also one significant correlation between Tuckman System III and CG ( $p < .01$  by two-tailed test). System III preference, as significantly correlated with the causal-genetic set, appears consistent with the theory underlying integrative complexity.

The notation that VM and CG responses formed skewed sample distributions and were therefore inappropriate for the assumption of normality has already been made. The comment is irrelevant for the VM correlations since there were no significant findings. That is, the correlations obtained assumed certain restrictions as the shape of the distribution. The restrictions are not tenable, and any significances might therefore be artifacts.

TABLE II

Intercorrelations of the conceptual measures  
with the inferential set categories

Variable <sup>o</sup>	VM	SMB	SMA	SMD	CG
Bieri IN SQ RT	.07	-.11	.04	-.10	-.03
Bieri IM SQ RT	.00	.03	.12	-.11	.01
Mayo IN Score	-.12	-.27	-.10	-.21	.25*
Mayo IM Score	-.16	.14	-.12	-.10	.32***
Tuckman I	.00	.28	-.11	-.24*	-.09
Tuckman II	-.01	-.07	.21	.07	-.21
Tuckman III	-.01	-.05	-.18	.07	.30**
Tuckman IV	.02	-.30	.07	.27***	.03

<sup>o</sup>Number identified variable named in full on table I

\* $p < .05$  by one-tailed test

\*\* $p < .01$  by two-tailed test

\*\*\* $p < .01$  by one-tailed test

Rank order ( $\rho$ ) correlations were computed for the three significant CG intercorrelations (10). The Pearson  $r$ 's for the Mayo IN-CG, Mayo IM-CG, and Tuckman III-CG relationships were .25, .32, and .30 respectively. The Spearman  $\rho$ s for these relationships were .26, .37, and .31. Since  $\rho$  is not directly comparable to  $r$ , these latter coefficients were converted to  $t$ 's which were 2.30 ( $p < .05$ , one-tailed), 3.55 ( $p < .01$ , one-tailed), and 2.84 ( $p < .01$ , two-tailed). These  $t$ 's maintain both the direction and significance as shown by  $r$ . Thus, the CG significances reflect real sample differences and cannot be explained on the basis of invalid parametric assumptions.

As concerns the individual inferential set categories themselves, there is no support for the hypotheses postulating either a negative relationship between any of the conceptual complexity measures and VM production, or a positive relationship for VM-Tuckman I.

The remaining four categories (SMA, SMB, SMD, CG) (with the exception of Tuckman I) were all hypothesized as being directly correlated with conceptual complexity.

Predictions were also not borne out within either the SMA or the SMB categories; no postulated significant results were obtained. On the other hand, however, it appears noteworthy that three significant relationships, Mayo IN-SMB, Tuckman I-SMB, and Tuckman IV-SMB (two-tailed  $p < .05$ ), were in the direction opposite to that predicted. While one of these findings might be due to alpha, the occurrence of three suggests the value of reinterpreting the implications of the SMB category. This will be elaborated upon later.

Two significant relationships were obtained with the SMD category--Tuckman I and Tuckman IV.

Finally, three significant findings were obtained within the CG category although the Tuckman III-CG (two-tailed,  $p < .01$ ) had not been included in the formal hypotheses. The Mayo IN-CG (one-tailed,  $p < .05$ ) and Mayo IM-CG (one-tailed,  $p < .01$ ) findings were as stipulated, thus, there appears to be a direct relation between a "high" degree of cognitive complexity as defined by Mayo and use of the CG inferential set.

In summary, the preponderance of the hypotheses asserting a relationship between the inferential set categories and the conceptual complexity indices could not be rejected.

Nevertheless, results significantly above chance were obtained with the Mayo and Tuckman measures. There does appear to be a relation between a "high" degree of conceptual complexity, as defined by these measures, and performance on the SMD and CG inferential sets. Moreover, a sufficient number of significant findings were obtained, opposite to those predicted, to merit theoretical or procedural reexamination. The Bieri indices did not appear to bear any relationship to inferential set preferences.

### DISCUSSION

The primary inference to be drawn from these results is that there does appear to be a modest relation between some measures of conceptual complexity and some levels of socialization as defined by Jones and Thibaut's schema of inferential sets. This relationship, however, appears to be quite specific; it is demonstrated rather clearly for some measures and some categories and not at all for others.

The Bieri measures seem in no way associated with the inferential sets. The Mayo measures, on the other hand, reflect a highly specific relationship with the causal-genetic category for both interpersonal and impersonal forms; and the Tuckman measure appears, also, to have some, perhaps more complex, potential for predicting the selective use of sets, at least as presently defined. Persons who produce either a large number of constructs, or who construe multiple alternatives to a situation, attempt to find causes to explain the behavior of other people.

The separation of the SM category into three subgroups has been mentioned. These subgroups, however, rather than reflecting different degrees of the same inferential set, appear to present actually rather different constructs. That is, a gradient between the three groups might have been established as follows: SMB reflecting concern with manifest behavior, SMA reflecting concern with readily stable capacity to perform, and SMD reflecting concern with specifically relevant dynamics, all as related to situational norms. This latter SMD category was specifically differentiated from the CG category in that the SMD statements, while causal, were only by inference whereas the CG category required that the assumed motivation be explicitly stated. The gradient ranges for the tangible, concrete (manifest behavior) to the successively more abstract and specified (dynamics explicitly stated). This analysis would lead to the

hypothesis, VM (personal and concrete evaluation) < CG (dynamic evaluation, implicitly or explicitly stated) with the SM category simply an intermediate position between the other two. Examination of table II supports the potential value of this tripartite conceptual arrangement, that is, for both Systems I and IV, there is a progressively negative relationship for System I and a progressively positive relationship for System IV across the gradient  $SMB < SMA < SMD$ . The determination of this relation in an a priori hypothesis, however, remains for future research.

Value-maintenance was unrelated to performance on any of the measures of conceptual complexity. Since this category reflected the highest interscorer agreement of all of the inferential sets, the lack of significance cannot be attributed to ambiguity in the definition of the criteria. A more plausible interpretation lies with the nature of the subject sample, that is, these college students present an intellectual, striving, adaptive population who would, in theory, produce relatively few of these responses. The lack of correlation may suggest that, for this circumscribed sample, fluctuations in the use of the category were undetected. Thus, the premise of the relationship  $VM < SM$  and/or  $CG$ , as predicted by conceptual complexity, was given some support on the right side of the "<" sign but not on the left. Yet, the overall assumption should probably not be discarded for the responses of a more broadly representative population might well demonstrate this full relationship.

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## DIMINISHED MALE ORIENTATION IN SUICIDAL BASIC TRAINEES

Douglas M. Harper

The suicidal adolescent has been the object of voluminous research. This has been aimed at the identification of socioeconomic, environmental, and personality factors which may predispose the vulnerable individual to react in a self-destructive manner (1, 3, 5, 15, 17).

Observation of basic trainees who had attempted suicide revealed an apparent pattern of diminished male interests or orientation. Perusal of the literature revealed scanty reference to the male suicidal patient and his masculine orientation or to his relationship with his father and authority figures (13, 14, 15, 17). It was conjectured whether diminished male orientation, and characteristic interpersonal and intrafamilial relationships, might be found in a group of suicidal trainees as contrasted to a control group and a group of administrative discharges.

This study of suicide attempts in adolescents was conducted at Lackland Air Force Base, Texas. It deals with late adolescent male enlisted trainees. These young men are introduced to the Air Force by means of 30 days of training spread over a six-week period. There is an average monthly population of 13,000 to 14,000 trainees. Many are separated from home for the first time. In the first few days they hand over their civilian clothes for uniforms, have their first "GI" haircut, and begin the rigors of military life with marching, physical conditioning, studying, and eating mess hall food. The training program emphasizes discipline and conformity which is geared to produce a responsive, responsible airman.

A small number of basic trainees are unable to complete the program because of intellectual, medical, or psychologic deficits. One to two percent are discharged during training because their behavior indicates that they may be unsuitable or unadaptable to the military. They are usually considered to have character pathology of varying degrees. They are administratively discharged from the service.

This study was an attempt to isolate significant factors relating to male orientation prevalent in a group of trainees who made suicide gestures. These trainees were compared to a second group who successfully completed basic training and to a third group who were discharged administratively. The aim was to discover whether a distinction relating to diminished male orientation could be made between these three groups of late adolescent males by means of a biographical questionnaire, brief structured interview, and the MMPI.

#### METHOD

##### Subjects

The subject sample included 120 basic trainees. It was divided into groups consisting of 40 trainees who made suicide attempts, 40 who successfully completed basic training, and 40 who received administrative separations but had made no suicide gesture.

A suicide attempt, for the purpose of this study, was defined as any physical act causing injury carried out by an individual against himself. Those making threats or with suicidal ruminations but without a gesture were not included.

During 1967, 60 trainees made suicide gestures. Of these, only one or two could be considered as having made serious attempts at self-destruction. The others involved ingestion of nonlethal doses of pills, drinking assorted fluids, and superficial abrasions to the wrists. In the last two years there have been no completed suicides in the basic trainee population of Lackland Air Force Base.

Patients given a psychotic diagnosis and homosexual discharges were excluded from the study.

The subjects included in the suicidal and administrative dischargee category came from the Inpatient Service at Wilford Hall USAF Hospital, and from the Mental Hygiene Clinic, both located at Lackland Air Force Base, Texas. The third category included 40 airmen who were in their next to the last day and successfully completing training when interviewed. The assumption was made that psychopathology of an incapacitating nature was not apparent in this group and that they had greater emotional stability and strength than the first two groups. The subjects in this control group

were picked by the squadrons in an alphabetically random fashion. They were told that the reason for their presence was their anticipated successful completion of training the following day. They had already received their orders to another base or technical school.

All 120 subjects were told by the author that a project was being conducted to attempt to learn why some trainees are able to complete basic training and others make a suicide attempt and/or are discharged administratively from the service. Each was further told that the information given the investigator would have no bearing on their eventual disposition.

#### Sources and Types of Data

The questionnaire and interview dealt with data relative to the subject's and his parent's and sibling's age, religion, marital status, sex, schooling, and occupation; best friend's occupation, age, location; history of previous suicide attempt; deaths in the family in the last five years; activities in school; dating history; reasons for joining the Air Force; and length of time in training. Other questions were then asked of the subject: Who was the most important adult in his life other than his spouse or sibling; to whom did he feel closest; and in whom did he confide, if anyone; and how did he handle periods when upset--by self, or via communication with someone, and if someone, who?

An MMPI was administered after the questionnaire and prior to the interview. This was scored by enlisted technicians trained in the administration of psychologic tests.

#### RESULTS

The areas focused upon were divided into three different categories. First was a consideration of the subject's relationship with his parents. This took into account indications of identification with the parent as well as patterns of affiliation. Secondly, the stability of his relationships were evaluated. This involved the stableness of parental union, deaths and suicide attempts in the family, and peer group orientation. Finally, a miscellaneous category was devised. This included consideration of school environment, reasons for joining the service, educational status of family members, number of siblings, and birth order.

Comparisons were done between all three subject groups. Significance testing was done by the chi-square method.

Table I shows a striking reversal in the relationships toward parents in the control and suicidal groups. The suicidal subject very definitely feels closest to his mother, is able to confide in her, and considers her the most important adult in his life. The paucity of individuals who relate to their fathers in the suicidal group is unmistakably apparent. In the control group, alignment with the father is evident by the number who felt they could confide in their father and considered him the most important adult in their life.

The disruption of significant relationships is noted in table II. This is most marked in the suicidal group. This applies both to death in the last 5 years in family members and loss by death, divorce, or desertion of parents. In the latter instance, the statistically significant finding relates to such losses occurring after the age of 12. Only one subject in the control group lost a parent from the household after his 12th birthday. However, 11 out of 40 in the suicidal group lost a parent after the age of 12. Of the parents lost, both before and after age 12, the preponderance was the father for both the suicide and control groups, 13/16 and 6/7, respectively.

There was a tendency for members of the suicidal group not to be engaged in team sports in high school. A great

TABLE I

Relationship with parents:  
Control compared with suicidal group

	Control (N=40)	S.A. (N=40)	$\chi^2$ with 1 D.F.
Feel closest to mother	13	21	N.S.
Feel closest to father	13	3	6.24 p < .05
Confide in mother	2	14	9.00 p < .01
Confide in father	11	2	6.24 p < .05
Mother most important adult	11	29	8.00 p < .01
Father most important adult	17	4	8.04 p < .01

TABLE II

Stability of relationships:  
Control compared with suicidal group

	Control (N=40)	S.A. (N=40)	$\chi^2$ with 1 D.F.
Parental loss due to divorce, death, desertion	7 (F-6, M-1)	16 (F-13, M-3)	N.S.
Loss prior to age 12	6 <sup>o</sup>	5	N.S.
Loss after age 12	1	11	8.33 p < .01
Death in family within 5 years	1	10	7.36 p < .01

<sup>o</sup>Excludes 2 subjects adopted as infants

number of fathers with less than a 9th grade education was noted in the suicidal subjects (table III). The tendency for the suicidal trainee to be the youngest child shows a trend toward significance. Factors evaluated, but not listed, did not show relevant differences.

Relatively few factors differentiate the suicidal from the administrative dischargee group. Inspection of table IV shows that the shift toward the mother is found also in the administrative group although it is less pronounced than in the suicidal subjects.

Table V shows less incidence of family disruption in the administrative group. The figures for parental loss include two mothers prior to and after age 12 in the administrative group. Eight of the 12 parental losses involved the father.

The suicidal subject tends to be the youngest while the administrative dischargee the oldest child as well as the oldest male in the sibship (table VI). The lack of education of the father in the suicidal patient is also noted as tending toward significance. All of the other factors failed to statistically differentiate between these two groups.

TABLE III

Miscellaneous:  
Control compared with suicidal group

	Control (N=40)	S.A. (N=40)	$\chi^2$ with 1 D.F.
Engagement in team sports	15	6	3.86 p < .05
Father with less than 9th grade education	9	19	N.S.
Mother with less than 9th grade education	7	10	N.S.
Subject only child	6	1	N.S.
Subject youngest child	9	18	N.S.

TABLE IV

Relationship with parents:  
Suicidal compared with administrative group

	S.A. (N=40)	Administrative (N=40)	$\chi^2$ with 1 D.F.
Feel closest to mother	21	17	N.S.
Feel closest to father	3	4	N.S.
Confide in mother	14	10	N.S.
Confide in father	2	1	N.S.
Mother most important adult	29	19	N.S.
Father most important adult	4	5	N.S.

TABLE V

Stability of relationships:  
Suicidal compared with administrative group

	S.A. (N=40)	Administrative (N=40)	$\chi^2$ with 1 D.F.
Parental loss due to divorce, death, desertion	16	12	N.S.
Loss prior to age 12	5	5 <sup>o</sup>	N.S.
Loss after age 12	11	7	N.S.
Death in family within 5 years	10	7	N.S.

<sup>o</sup>Excludes 2 subjects adopted as infants

TABLE VI

Miscellaneous:  
Suicidal compared with administrative group

	S.A. (N=40)	Administrative (N=40)	$\chi^2$ with 1 D.F.
Engagement in team sports	6	5	N.S.
Father with less than 9th grade education	19	10	N.S.
Mother with less than 9th grade education	10	8	N.S.
Subject youngest	18	9	N.S.
Subject oldest	9	18	N.S.
Subject oldest male sibling	7	19	5.54 p < .05

The mean t score on the M-F scale of the MMPI for the control group was 23.1 placing them in the area of average male interest pattern (a t score of less than 25.5). For the suicidal group, the mean t score was 26.1, and for the administrative group it was 26.7. The mean for the latter two would be in the moderately low male type interest pattern (a t score between 25.5 and 30.5). Although the difference of these scores was not statistically significant, a trend was indicated which might be more clear in a larger patient population.

There were 20 subjects in the suicidal group and 13 in the administrative dischargée group who had MMPI validity scale scores elevated more than two standard deviations above the mean. Eliminating these technically invalid MMPI's did not appreciably change the group averages. There were no subjects in the control group with such elevations.

The typical profile of the "normal" basic trainee is a young man 19.6 years of age who comes from an intact home, is at least a high school graduate (39/40) with involvement in team sports activities in high school, has no evidence of recent deaths in the family, and has a tendency to look to the father for advice, comfort, and guidance.

The typical profile of the basic trainee who has made a suicidal gesture is 19.0 years of age, comes from a home possibly disrupted not only by divorce, death, or desertion with the father being the excluded one, but also by the death of a relative within the last five years. He tends to be the youngest child in the sibship with no substantial history of a suicide attempt. He has at least a high school education (35/40) with limited involvement in team sports in high school. The father may have less than a 9th grade education. He looks to his mother for advice, comfort, and guidance.

The typical profile of the basic trainee who is discharged administratively is similar to the suicidal subject with the exception that he tends to be the oldest sibling as well as the oldest male sibling. He is not likely to have a father with less than a 9th grade education.

#### DISCUSSION

An inspection of the tables and review of the typical profiles for the three groups very definitely indicates that

trainees who make suicide gestures or are recommended for discharge tend to be those who have aligned themselves with their mother rather than their father. (I hesitate to say "identify with" because such an intrapsychic mechanism was not evaluated in this objectively-oriented study. However, such a pattern could be inferred from the tabulated results.) The predictive ability would not seem to be able to distinguish the suicidal from the administrative group which are quite similar.

The actual loss of the father in many instances, especially in the suicidal group, has in effect rendered him unavailable because of death, divorce, or desertion. It has been suggested that such occurrences predispose the individual to react suicidally to separation or losses, real or threatened, in the future (4, 9). A common denominator for all airman basics is separation from home.

Another factor dealing with the subject's relationship with his father is an increased incidence, in the suicidal group as compared to the control group, of fathers with less than a 9th grade education, 19/40 in the former, 9/40 in the latter. This may have an effect upon the fostering of greater movement toward the mother.

Disruption of the home by parental death, divorce, or desertion has been evaluated previously (2, 4, 8, 9, 10, 11, 16). These studies include males and females with a preponderance of the latter. There is general agreement that the father seems to be the absent one from the household (12, 13, 14, 16). However, the emphasis seems to stress the significance of the loss for the subject early in his life (6, 7). This study shows a greater incidence of loss occurring after the age of 12 in the suicidal group (11/40). There was only one family so disrupted in the control group. This would seem to stress the importance of stability of the family for the male adolescent especially when he is called upon to function in a male environment away from home.

The ability for the subjects in the control group to successfully deal with the stresses of basic training is self-evident. These men have indicated, prior to enlistment, a movement toward their fathers. This seemingly predisposes to successful adaptation to a stressful male environment such as basic training. These trainees in the suicidal group who have not indicated alignment with their fathers, or who have no biological father available (13/40), are, conversely, predisposed to failure in a stressful male environment.

Ability to interact with the male training instructor is an indication of ultimate success or failure in basic training. This would support the findings of Schneer et al., (13, 14) that male adolescents who attempt suicide have concern over their masculine identity.

Scores on the M-F scale indicate a trend of a greater male orientation in the control group. A possible explanation for the large number of elevated scores on the validity scale in the suicidal, administrative group of the MMPI lies in the absence of an administrative or medical decision dealing with these trainees at the time that they are interviewed.

#### CONCLUSIONS

This study has shown that basic trainees who have made a suicide gesture had a closer relationship with their mothers than with their fathers. The control group who successfully completed training had a closer relationship with their fathers.

The findings were divided into three different categories. The first considered the subject's relationship with his parents, the second the stability of the family, and the third a miscellaneous category. The results very definitely indicate a greater movement of the suicide group toward the mother, almost to the exclusion of the father, with a reversal of this trend in the control group.

The MMPI was found to be of little help in evaluating the possible differences in "maleness" in these three groups, but it did show a trend away from male interest patterns in the suicidal and administrative groups.

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## LSD AND SOCIALIZATION

Don A. Rockwell

In the last five years the use of LSD by middle class urban youth has grown dramatically until it has reached its current "near epidemic" (14) proportions. As social scientists, one of our tasks is to hypothesize as to why this "LSD movement" has appeared at this point in time and why it has such great appeal for the middle class urban adolescent and young adult. This paper presents some hypotheses along this line based both on current sociologic and psychologic theory and on clinical experience with some twenty-five psychiatric casualties of the "LSD movement."

### HISTORY

In order to put the "LSD movement" in proper perspective, it is worthwhile reflecting first on the history of the use of psychedelics in this country. Of critical importance is the necessity of recognizing that psychedelics--in the form of peyote, mescaline, and marijuana--had been available on the American scene for many years prior to the current "psychedelic revolution." The members of the Native American Church, the jazz man of the '40s, and those interested in esoteric experiences were using psychedelics long before they became a "cause celebre." The psychedelics thus have been available to the culture for some time. We note that there has been a progressive increasing use of psychedelics in the United States since the early 1950's. After Hoffmann's (6) accidental discovery of the mind-altering effects of LSD in 1943, the first major boost for psychedelics came with Aldous Huxley's (8) description of his fantastic experience with mescaline. Following this, LSD was used primarily by middle class professionals--formally in research and informally in the interest of having "growth," "creative," "therapeutic," or "mystico-religious" experiences. This latter informal use of LSD led to its use by an ever expanding circle of people. The second major boost for the psychedelics started when Drs. T. Leary and R. Alpert--having tried psilocybin in Mexico--started experimentation with LSD at Harvard in 1961. This experimentation led away from "science" and resulted

eventually in Leary and Alpert's dismissal from Harvard. The group that revolved around Leary and Alpert now became an "in-group" fighting the "persecutory establishment." There followed a series of escalating steps resulting in the public hysteria of 1965 as LSD received increasing publicity--whether for or against is immaterial--thus attracting more and more people's attention, more publicity, more attention, and so on. The notoriety attracted the curious, the adventurous, and the discontents which tend to be features of the youth of America. The LSD movement, started in the 1950's with middle class professionals, became in the 1960's the property of the adolescent children of this same middle class. The eternal struggle between generations for the present generation is joined on the battleground of the LSD controversy.

Thus far we have indicated that in some ways LSD's introduction into a subculture has followed the usual pattern of any new drug or indeed any novelty. The introduction of the drug was followed by a research phase, a novelty phase, and finally an enthusiastic proselytizing phase. While the pattern is the same, the degree of LSD's attraction to certain groups of people made the novelty and especially the enthusiastic phases far more widespread than is typical of the usual drug or fad. A partial explanation for this widespread use and abuse of LSD can be found by examining some characteristics of current middle class urban life.

#### ECONOMICS

Consider for the moment how our culture has set the stage for widespread use and abuse of drugs. Middle class Americans have become increasingly affluent since the Great Depression as the Protestant Ethic has paid off beyond wildest expectations. Our industrialized technologic society--based on industry and ingenuity--has given us a materially rich environment. Associated with this affluence is an American faith in science and research. This adds to the affluence and is made possible by it. This faith in science and support of it has allowed medical-pharmacological research to blossom and has provided us with a variety of lifesaving and useful drugs.

We recognize that there are necessary consequences of this increasing armamentarium of pharmacologic agents. We all agree that the benefits outweigh the hazards but we must recognize the hazards. One hazard that we cannot overlook

is that we have convinced most of middle class America that taking drugs is a routine activity--even in many cases a desirable or necessary activity. Affluence has made it possible for us to guard our health zealously and provided us the drugs to do this. It has also made us a drug-taking culture. We accept substances which we feel will alter us physically or psychologically without question. This is as it should be, but as with most good things in pharmacology and medicine, there are unwanted side effects. In this case, the side effect is psychologic. We, as a drug-taking culture, are now less afraid of drugs in the widest sense and are far less reluctant to try a new mind or body-altering substance than we were twenty years ago. Let me point out something of the psychology of this side effect. If I never take a drug, here broadly defined to include any body-altering substances, then taking a new or even illegal drug is a much more difficult step psychologically for me than if I routinely accept "popping a pill" for my headaches, cold, fatigue, or nerves.

For the pharmacologic virgin to overcome his initial psychologic inertia about the idea of drugs, and in addition, to overcome the usual inhibitions about beginning any new and unpredictable experience, the appeal of that experience must be much greater than for the pharmacologic sophisticate of our society. Our culture "knows" about drugs from experience and thus has far less inhibitions about the use of any new substance--a fact which is both a blessing and a curse.

Affluence then has provided us with the money to support research, to develop drugs, and to buy them. It also allows us to slip easily from legitimate drug use to illegitimate drug abuse. Affluence provides us with the wherewithal to buy the drugs I prescribe and also to buy the drugs I proscribe from the friendly psychedelic pharmacopeia.

Before I'm accused of being against affluence, let me note that it is not affluence per se that gives us problems, rather it is the way we as a culture deal with it. Our Protestant Ethic has not prepared us to deal with affluence and its by-products of leisure time and relative comfort. Our culture, particularly the middle class, has also been oversold on happiness as being an inalienable right. It is not happiness but the pursuit of it that is our inalienable right, and that's a major difference for us psychologically. One pursues happiness, and this implies a running after a fleeting goal. In many ways the running after constitutes

an important element, and yet the LSD generation, those between 10 and 25 years old, have grown up believing that happiness comes with a new kind of cigarette or hair spray--something one expects and/or can buy. The pursuit of happiness has been downplayed to such an extent that unhappiness is seen by some of the LSD generation as a symptom of personal abnormality, a state of being that shows you to be somehow different from the "happy others," a state to be avoided or gotten out of at all costs.

Thus we can see how in some ways affluence, and the way the middle class has coped and failed to cope with it, makes it understandable that drug abuse in general is a problem for those exposed to our drug-taking culture from birth on i.e., the middle class youth of the present generation.

#### SOCIALIZATION

The present LSD generation has been socialized into a drug-taking, happiness-oriented, affluent society. This makes their abuse of drugs to some degree understandable. But, in addition, the present younger generation are heirs to a second major change which has probably had an even greater impact in terms of our understanding the psychedelic generation. The change I'm alluding to is the shift in child rearing practices of the urban middle class which took place following World War II. It is no coincidence that these changes in child rearing practices took place in the same period in which most of the present day "hippies" were born and raised. Unquestionably the milieu in which the present day 12 to 25 year olds grew up with was different from that of earlier generations. In addition to the social and economic changes discussed previously, and affecting the emotional environment of the home peripherally, the child rearing practices of the urban middle class changed perceptibly in the early and mid-'40s. These changes in child rearing practices are crucially important since they have immediate consequences for the child during his formative years. The changes in child rearing practices have been well documented by Branfenbrenner (2), Sears (13), and others (6, 9). For our purposes, we need only to summarize the evidence as it applies to the issue at hand.

Very briefly, we might characterize the child rearing practices from 1914 up to the early '40s as being directed at the control of the child's innate intense preformed drives.

This required that the child be controlled by the mother and can be seen by the rigid adherence for feeding and so forth that were widely accepted in the '20s and '30s. The results of this kind of approach to the child are the middle class adults of today. I want to emphasize that while I may mention relatively minor specific child rearing practices, they are used merely to typify the overall child rearing philosophy of the time. In the early 1940's, child rearing practices shifted significantly from this earlier trend. The spirit was "do what seems natural in training your child and be sure he's 'ready' before you urge new skills." The age of weaning and toilet training was increased substantially, and there was a distinct softening of other longstanding prohibitions. Middle class parents led by Dr. Spock were in a revolt against the authoritarian, rigid, constraining child rearing practices of the prewar generations. Starting in the early '40s, children were increasingly encouraged to see the reasoning behind the rules. Corrective discipline replaced punishment. Schedules became flexible. All of these changes led to our current generation of adolescents and young adults which, for the most part, is an eminently reasonable generation.

The catch in this laudable permissive environment is that there is a fine line between "permissiveness" and "over-permissiveness," and in some families, as we would expect, permissiveness came to be seen as parental submission to the child's needs and feelings i.e., overpermissiveness. Overpermissiveness has predictable consequences for the personality of the growing infant and child. The main consequence of interest to us here today is in the realm of development of the child's ego strength. Ego strength is an abstraction which may be said to be concerned mainly with the child's ability to react to the world in the same way others do. As with other kinds of strength, it derives from exercise and training of innate capacities. Overpermissiveness actively prevents the child from exercising and training his developing ego since he is protected from the day to day difficulties which he would otherwise encounter. The permissive parent recognizes the need for these encounters which are frustrating to the child and recognizes that the child's mastery of the difficulty is an important growth and ego strengthening process. The line between tolerable frustration of the child and intolerable frustration is a fine one, and making this discrimination may be too anxiety provoking for the parent who, as a result, protects the child from many situations which the child can and should deal with. This overprotectiveness frequently combines with

overpermissiveness as the child grows older so that the child grows up in a sheltered environment in which his needs and wishes dominate his parent's behavior. One example may serve to characterize the infinite variety of ways that this can be manifested.

Picture a two-year-old toddler in a middle class family kitchen. Mother has just taken a hot pan from the oven and put it down hurriedly on a chair. The toddler, curious as always, reaches for it. At this point the permissive mother takes his reaching hand, and while preventing him from burning it, allows the child to experience the warmth near the pan and explains about the hot pan thus teaching the child the lesson to be learned about ovens and pans and perhaps most important, using the child's own curiosity and initiative in a constructive way. The overpermissive and/or overprotective mother might do one of two things. She might be permissive and allow the child to touch the pan and burn himself thus "learning his lesson" or teaching him at the same time that: (1) people won't stop me from hurting myself and, (2) that initiating activity or being curious ends up with pain for me. Or, the mother might be overprotective and grab his hand anxiously away with or without a verbal warning. This might teach the child, if repeated in many kinds of situations, the following lessons. "When I am curious about something, somebody is going to stop me before I act." "I can never satisfy my curiosity." "Mother gets upset if I do things on my own." The consequences of this childhood training for the later adult might be that he fails to learn from his own experience and he uses his impulses to upset other people.

The child of these parents experiences the world in a different way from the usual child. The overprotected child lives in an environment without difficulties, and without satisfaction of his curiosity, and without the gratification of mastering a potential learning problem. The overpermissive environment ignores other's needs in favor of the child's needs, a pleasant situation, but not the real adult world of today. Thus, these children grow up with a weakened ego relative to their peers. The "acid-head" continues to seek, in his adolescent and young adult years, the state of bliss he experienced as a small child where he is the center of the universe, where his needs are met very quickly by the outside world, and where the only pain is that of never completing an act. LSD promises an answer to this search. "You will once again be at peace with the universe and people."

Your needs are met within yourself, and you never have to complete anything. You turn on, tune in, and drop out."

A striking contrast to the withdrawing "acid-head" is the activist youth who tends to have a similar background and sees the world of today quite similarly but has developed the ego strength to want to change the world to conform to his ideal rather than as the "acid-head" does--to give up and withdraw from his world.

Let us review for a moment my major thesis thus far. I've tried to indicate that the LSD movement is an understandable phenomenon which is the result of various factors impinging together on our urban middle class world. I have argued that at least two necessary preconditions to drug abuse--a drug taking culture and a particular kind of susceptible ego structure--have become widespread in middle class American youth as a result of recent changes in the socialization process. The final question is then, "why the particular drug LSD?"

#### THE APPEAL OF LSD

From the previous discussion, it is apparent that there exists among the middle class American youth a number of individuals especially susceptible to drug abuse. These individuals are drawn into the abuse of LSD for a multiplicity of reasons: LSD's ready availability, the enticement of peers, "hypertrophy of this adolescence sense of exploratory fearlessness and immediacy," the effects of "initial exposure experiences" (4), and in an attempt to "expand one's awareness" (12). Overriding these reasons, however, appears the basic meaning of the "trip."

The psychedelic "trip," as with any "trip," is usually taken either "to get away" or "to see something new." The present youth "trip out" is for just these reasons: either to get away from a world which in many ways is the antithesis of the one they were promised in their early childhood or to find that idyllic world within themselves--discovering the "dimensions of consciousness." Thus LSD has become the favored drug and the psychedelics the favored class of drugs because they seem to be the answer to the questions this generation is asking, and they are, in many ways, the perhaps irrational extension of trends within the mainstream of American middle class culture--the quest for instant happiness, the high value placed on self-awareness, and the avenue

to value change. The search for new values is characteristic of the middle class youth, and perhaps unfortunately, continued LSD use leads to a significant shift in values. This shift in personal values from valuing industry, material wealth, and so forth to valuing the introspective, the sensual, and so on is important for the present and the future of psychedelics.

#### PSYCHEDELICS TODAY

The change in personal values of the chronic LSD user plays a major role in the current psychedelic movement. Becoming an "acid-head" has all of the qualities of religious conversion. One has a dramatic mystico-religious experience, one becomes converted, and subculture maintains, supports, and fosters the changed status of the converted individual who proceeds to proselytize his religion among the unconverted and uninitiated. This change is opposed vigorously by the stable middle class establishment for several reasons. First of all, the social system inevitably moves slowly in any direction and tends to preserve the status quo through inertia and active resistance to change. Secondly, because the "love generation" vociferously opposes the values revered and espoused by the "straight" middle class, the middle class responds in kind. Finally, the society reacts strongly since, in part, the value change undergone by the hippie represents the well repressed desire of most "squares." All of us harbor the wish to rebel and the wish to return to a narcissistic, dependent, euphoric existence. This impulse is defended against with a force proportional to the strength of the repressed impulse. The LSD movement represents this impulse for our society, and the strong reaction by the society against the hippies represents the defense we all have against living out this impulse ourselves. In the current psychedelic scene, the punitive laws enacted last year represents society's collective defense against our collective repressed impulse.

#### THE PSYCHEDELICS TOMORROW

The consequence for society of this irrational impulse on the part of one segment of society and an equally irrational defense by another segment is clear. The hysteria over LSD led to premature punitive legislation in California. As a result, we can begin to see the consequences that this legislation has had on the LSD movement. First, it forces the

issue of LSD before we can hope to make objective evaluations. It makes martyrs of those within the movement and solidifies the LSD advocates in a common purpose--opposing the law. It now makes LSD an even more exciting drug and in addition, attracts the purely antisocial individual to its use. By this, I mean that those people actively searching for a way to attack society now see LSD as one further way to accomplish this purpose. And the use of LSD by this group is particularly dangerous since these people are driven by hostile impulses which are poorly controlled at best and which may be released when LSD breaks down their already weakened controls. Making LSD an illegal drug puts it into the same psychologic category as marijuana and the opiates, and the same sociologic category of people handling pot and opiates now handle LSD. Thus, LSD has passed from the hands of friends and peers into the hands of the professional criminal since (1) it's become profitable, and (2) he's already risking a felony offense in his sale of pot and opiates, and adding LSD to his list of products does not increase his risk.

So today the young person seeking LSD gets it from a professional also pushing pot and opiates whereas formerly he got it from a friend who was only interested in psychedelics. This greatly increases the chances that the young person will be seduced away from psychedelics and into narcotics--a step in the wrong direction for the young person interested in "kicks."

The laws also make the buyer subject to severe penalties if he's caught. The effect of this is to increase his anxiety about taking the drug which, if he nevertheless proceeds to take it, markedly increases the chances of his having a "bad trip" with a resultant increase in psychiatric casualties--the very thing the laws were aimed at eliminating. The laws also tend to keep young people from coming immediately for psychiatric help for "bad trips." Their fear of imprisonment keeps them away until a merely "bad trip" turns into a more difficult to treat nightmare of psychoses. Here again, the laws contribute to the psychiatric morbidity and mortality of LSD use.

A further unfortunate consequence of the legislation is that it permits the public to relax and say, "Well, we've taken care of that little problem." Thus, we completely ignore the reality of what is a continuing problem totally untouchable by legislation alone. The fact that the laws on LSD are enforceable only with great difficulty by enforcement

agencies is largely ignored by the public and the laws themselves.

The final unfortunate consequence of the legislation is that it has severely restricted the amount of research on LSD. A curious paradox exists when I personally can obtain large amounts of illegal LSD in the Haight-Ashbury area, but professionally, I cannot obtain LSD unless I have an impeccable position in a large research position plus a grant from NIMH. Practically all LSD research in this country has ground to a halt. This is due, in part, to the difficulty in designing an approvable research project and obtaining an NIMH grant because competent researchers are justifiably reluctant to become involved in the emotional hassles which envelop LSD research. Research is tough enough without these additional drawbacks.

The legislation thus has had the effect that most overly severe premature prohibitive legislation has. It, in fact, provokes the very behavior it hopes to eliminate and serves to continue the conflict it was aimed at resolving. The laws have cast the die for the future of the LSD movement. We can expect that in the years to come, barring a reversal of society's position, LSD will be known less and less as a psychedelic drug and more and more as a psychotomimetic. It will appeal less to the creative and curious and more to the rebellious and psychopathologic. It is clear that "the LSD problem" will be with us for years to come.

#### A SYMBOLIC INTERACTIONALIST INTERPRETATION

Thus far in our discussion of the "love generation," we have taken a somewhat traditional approach to the issue. Starting from our clinical experience with the psychiatric casualties of the LSD movement, we went on to focus on contributions to our understanding of the problem deriving from traditional sociologic and ego psychologic theory. Very clearly this represents a highly oversimplified and overgeneralized conceptualization of a tremendously complex area. Nevertheless this tentative attempt to bring order into a chaotic area is not without its assets over and above the liabilities it is heir to. This tentative attempt can now be bolstered and broadened by introducing another way of examining the dynamic ongoing situation. I refer to taking a symbolic interactionist perspective of the LSD interactional scene.

The symbolic interactionist perspective adds body to our earlier skeletal formulation of the problem. First of all, the symbolic interactionist views the LSD scene from an important orientation. In the language of the hippie, the symbolic interactionist tries to find out "where it's at." Rather than viewing the scene as the result of social, psychologic, or other factors impinging on the hippie, the symbolic interactionist regards the hippie as following out a line of action based on his own interpretation of the situations with which he must cope (11). The hippies' action is built up (constructed) through his noting and interpreting the features of the situations in which he acts. Thus the hippie becomes not so much the passive victim of his socio-psychologic world but rather the active interpreter of this world to himself, and through his self-indications and his ways of dealing with his self-indications, he constructs his action. Of crucial importance here is the implication that hippie behavior arises from his own self-indications not from our theories and speculations about his self-indications. The implications of this are quite clear in terms of further investigation of the "LSD movement." We need to attempt to get inside of the "self" of the hippie, to begin to see how the hippie defines his situation, and what indications he makes to himself.

A second major contribution that symbolic interaction theory makes to our understanding the hippie is its stress on the importance of the self-conception or "I." Earlier in the paper we noted the possible consequences of "atypical" socialization on some middle class infants and children. The symbolic interactionist would urge us to recognize even more explicitly how socialization, a complex interaction occurring primarily between the immature human infant and his mother, has very important consequences for the child's self-indications and for his self-conception. Thus, symbolic interactionists assume that one's current stance in life is inextricably intertwined with all of one's previous self-indications and experience, that is, the "new" may only modify the "old." Thus a conception of self learned in the process of socialization must inevitably have an impact on both later learning and later behavior. This self-conception may be progressively altered but never eliminated. Here the clinical and the theoretical find themselves impressively in agreement. The hippie who gets seen by the psychiatrist describes with depressing lucidity this characteristic--a self-conception which predates his current behavior and which extends back to earliest memories. Striking confirmation of this comes from sources outside of the therapy hour proper

not only from family but also from friends, teachers, and others.

Symbolic interaction theory can contribute to our understanding of not only the individual but also the group life of the hippie (1). We will refer only to one aspect of this contribution and bypass the possibilities of investigating the importance of role-taking, reference relationships, identity transformation, and so forth due to considerations of time and length. The one aspect of the group life of the hippie to which I refer is the "herd" character of Haight-Ashbury life (10). Crucial here is the clinical recognition that, despite the supposed emphasis on interpersonal communication in the "love generation," in fact life for the hippie is closer to the collective monologue than to the interactive dialogue. This characteristic lack of communication which exists not just between the hippie and the straight world but between the hippies themselves was related earlier to the basic search of the hippie i.e., he seeks the ability to "get with it" through LSD, however, the "vibes" represent not symbolic communication but a characteristic of the herd. His search for others through the use of LSD and other drugs is, however, predestined to failure based on many hippies' difficulty in "taking the role of the other" in Mead's sense. So we see again how this difficulty, in symbolic interaction terms--the inability to take the role of a "generalized other" in turn related to the earlier problems of socialization and self-conception, is coped with by the individual through his quest for "the LSD experience" which promises solutions to insoluble problems.

Finally, we return again to the infinite complexity of the problem. Current social and psychologic theories admit readily to the complexity of human behavior yet continually reduce it, as we have done here, to manageable abstractions all too often at some distance from what they are intended to cope with. Symbolic interactionists urge us to approach social and psychologic complexities at the crucial but difficult stage of the symbolic interaction, both intra and interpersonal, a formidable but necessary task.

#### CONCLUSIONS

This paper has explored the vicissitudes of the LSD problem in an attempt to develop a tentative understanding of complex phenomena. In the course of the paper we

explored the historic and economic antecedents of the LSD movement.

Changes in our urban middle class society were noted to be temporally related to some aspects of the current crisis. An exploration of socialization in the United States coupled with theory of ego development led to some plausible conclusions about the hippie of today and were confirmed in a limited way through clinical example.

A reexamination of the phenomena from a different perspective, the symbolic interactionist, revealed some areas of agreement and some areas of glaring inadequacy in the traditional perspective. The advantages of viewing the problem from the new perspective were weighted against the difficulties of the symbolic interactionist approach with the conclusion being that only the symbolic interactionist approach appreciates the complexity of human behavior, and difficult as it may be, this approach offers hope for the tentative understanding of complex human interaction.

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THERAPEUTIC ABORTION OF MILITARY DEPENDENTS  
FOR PSYCHIATRIC REASONS

M. Vernon Ordiway

I would like to present five psychiatric cases in which therapeutic abortion was a major consideration. These cases I saw during my first year as psychiatrist at South Ruislip USAF Hospital near London. This group of five is not large enough to be statistically significant. However, it demonstrates many of the characteristics of larger groups reported in the literature (3). Therefore, it is my opinion this group can profitably be examined as a starting point for consideration of some of the problems involved in therapeutic abortion.

The following points will be emphasized:

1. There are cases in which therapeutic abortion may be the treatment of choice.
2. Each case must be considered on its own merits free from personal or cultural prejudice.
3. No woman will be aborted against her will.
4. If an abortion becomes a secondary gain of emotional instability, a dangerous precedent may be established.
5. Availability of abortion from civilian practitioners may be increased by medicare.
6. Private patients are considered candidates for therapeutic abortion more often than clinic patients or patients seen by government agencies.

The first patient is the 35-year-old wife of a captain who is pregnant with her fifth child. After having seen the husband and wife for two hours, I was aware that the husband was the one who desired the abortion. The husband was certain that the birth of this child would be followed by a postpartum depression similar to that following two previous pregnancies. He envisaged himself at home taking care of the

baby and four other children while his wife was having her 25th shock treatment as on a previous occasion. For this reason he was angry when it was explained to him that his wife did not want an abortion. He was allowed to ventilate his fears and anger. He was assured of support and consideration in whatever problems might develop. He then became much more amenable to his wife's carrying through the pregnancy, and she has now delivered a healthy child. The patient has kept up contact with our clinic on an informal basis. However, two months after the birth of the child, the husband called my home in an agitated state. His wife would not get out of bed, eat, or nurse the baby. He was willing to accept immediate hospitalization for his wife since I had already discussed with him the many therapeutic measures, including short-term hospitalization, our clinic had to offer his family. The patient made good progress after five days of hospitalization. For the first time, he came to look upon the psychiatrist as an ally rather than an adversary.

This case vividly illustrates one of the facts that should be borne in mind when therapeutic abortion is considered, namely, that if a pregnant woman wishes to carry on her pregnancy, no physician is going to interfere. None of the present proposals being made throughout the English speaking world to liberalize consideration of abortion procedures, in any way, advocates the abortion of any female who does not wish to be aborted (1).

The second patient is a 37-year-old mother of six. She has been hospitalized three times in the past for psychiatric reasons. The patient stated quite openly that she had to "get rid" of the baby, that she was unable to face the prospect of staying at home with seven children, now that another was expected, while her husband spent one of his frequent nights away. I recommended a therapeutic abortion and arranged to have her case evaluated by another military psychiatrist who, according to the patient's husband, read the regulation to her and told her that she was not "sick" enough to be granted a therapeutic abortion. The next weekend, while her husband was away, the patient was taken by ambulance from her home where, according to her British neighbors, she was striking her two year old on the head, pounding herself on the abdomen, and crying out "They won't let me get rid of this one so at least I can get rid of the one that's already out." Prior to this, the patient had fallen downstairs after taking an overdose of tranquilizers which had been given her by other physicians. This may not have been a bona fide suicide attempt, but it represents the misuse of drugs and

alcohol that causes the death of some pregnant women each year (1). The patient consulted a private gynecologist, but a problem arose when he demanded his fee before the operation explaining that he had difficulty with Americans over the fee in the past. By this time, more than a month had elapsed since my first session with the patient and her husband. Since the family did not have the fee, and the patient was in her fifth month, they decided to have the child. A tubal ligation was performed at an Air Force hospital following delivery.

The third patient is a 28-year-old mother of three, dependent of a staff sergeant, who had a therapeutic abortion performed one year ago while in the United States. This woman called the hospital one night saying that she could not take care of her children, she was going to take them to the American Embassy, leave them there, and then get a plane to Vietnam to bring her husband back to take care of her children, etc. The patient was unable to accept the fact that her husband would not be returned directly to England from Vietnam permanently if she acted wildly enough. While discussing with her why she imagined such wild actions would achieve her desired effect, she said that a year ago "They wouldn't give me a therapeutic abortion so I really threw a fit and then they did."

My last experience with this family was to listen to the husband and members of the wife's family decide that he would have to take the children to his various relatives in the United States for the remainder of his tour in Vietnam.

This case illustrates the dangerous pattern which may be intensified, if not in fact started, when such a highly valued and sought for procedure becomes too closely associated in the patient's mind with emotional instability, especially of the dramatic acting out, immature, suicide attempting variety.

The fourth patient is a 26-year-old woman seen after the birth of her third child, the fourth pregnancy in four years of marriage. The man and his wife had been having marital difficulties since the spontaneous abortion of the second pregnancy. When she was three months pregnant, a military physician (a personal friend of the family) made private arrangements with a London physician for a therapeutic abortion. She had a last minute change of mind, dramatically sitting up on the table and saying "No, I think it would be wrong to have an abortion." She then returned

to her husband in Germany and explained that she had been refused the abortion because she had been in her third month of pregnancy and that this was too late. The husband accepted this explanation at the time. Since then, he has learned that many women have been aborted in the third month by the same physician and naturally is in some doubt. The wife cannot bring herself to tell him the truth.

The fifth patient is an unmarried 23-year-old retarded daughter of an officer. This is the only unmarried woman of the series. She would be in the minority of any large series when considering either therapeutic or illegal abortions (3). This girl, though she was retarded, was fully appreciative of the kind of things that would make most 23-year-old unmarried girls uncomfortable in her situation. She had been impregnated by a married man and was fearful of the embarrassment this would cause her family. She felt unable to take care of a baby and was sure it would have all the liabilities that she had ever had such as epilepsy. This girl was recommended for a therapeutic abortion on the basis that she was not capable of taking care of the child without active support from someone very close to her. There was no prospect of marriage, and the parents were certainly unwilling to take any responsibility for the care of the child. It was further felt that the withdrawal of parental affection that was already taking place because she was such a "bad girl" would cause her emotional status to deteriorate. She was refused the abortion on the basis that, although her parents had signed the authorization, the patient had never been declared legally incompetent. Of course, some incompetence had been granted simply by the fact that she was still considered a dependent at her age. Nevertheless, she had never been declared legally incompetent, and it was feared that since she had not signed the form herself, in the future she might be in a position to sue for assault. On the other hand, if she signed the form, this would prove that she was not incompetent and therefore able to raise the child. This patient was subsequently aborted by a civilian physician with part of the cost defrayed by the government. After the operation (abdominal type), it took much direct persuasion, from both the operating physician and the OB-GYN specialist at our hospital, to dissuade the parents from going to Europe and leaving the convalescent girl alone in London. They finally hired a practical nurse to be with her as they kept to their original travel plans.

The last three cases illustrate the point that private patients outnumber clinic patients as candidates for

therapeutic abortion (4). Military patients may become private patients whenever refused a therapeutic abortion by the military hospital in the area (2), and we can expect more of the people we serve to attempt to avail themselves of this service in the future. As military physicians with complete access to the medical and military records of the family, we are in a position to evaluate cases far better than the civilian physician who may not even be in the same country where the family is stationed. Moreover, our opinions would not be swayed by the possibility of personal financial gain. If we are prepared to consider each case individually, putting aside personal bias in favor of sympathetic understanding, we will be able to help our patients appreciate the issues more clearly and make their decisions more rationally. In doing so, we will be able to perform a service to our patients that has been sorely neglected in the past in military medical practice and in most areas of civilian practice.

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## A DISCUSSION OF SOME PSYCHIATRIC ASPECTS OF THERAPEUTIC ABORTION

John J. Kavanagh

The five cases presented by Dr. Ordiway help to illustrate the complexities and difficulties that encompass the problem of recommending therapeutic abortion for psychiatric reasons. This is particularly so when psychiatric indications are extended to social and economic considerations as well as clinical.

Dr. Ordiway discusses some of the ramifications of requests for therapeutic abortion and the impact of the clinician's decision on the subsequent behavior of the patients. He recommends a posture of understanding and a consideration of all aspects of the problem rather than an attitude of rigidity and the tendency to hide behind a literal interpretation of a regulation.

However, before we take a more detailed look at the psychiatric aspects of the problem, one point needs emphasis. It is the fact that the issue is not a simple matter to be resolved by more liberal abortion laws. To assume so is to take a facile, simplistic attitude toward a complex entity involving legal, moral, social, and economic parameters as well as strictly clinical considerations. Let us consider some of these parameters.

### PSYCHIATRIC INDICATIONS

There are perhaps three major psychiatric indications. These are: (1) The danger of exacerbation of an existing psychosis or the precipitating of a psychosis (puerperal or postpartum psychosis); (2) The exacerbation or precipitation of a severe neurosis; and (3) Depression and suicide.

#### Psychosis

Simon (9) states that a diagnosis of schizophrenia *per se*, is no indication for therapeutic abortion, and further, it is no simple matter to predict development or exacerbation

of a psychotic episode. He feels that no categorical decision can be made, that a consideration of all factors is imperative, and that the attitude of the patient toward the pregnancy and resultant child is important.

Myre Sim (8) reporting on 213 patients with puerperal psychosis concluded that, (a) puerperal psychosis is virtually unpredictable, (b) it carries a good prognosis, (c) suicide is less of a risk in pregnant females than nonpregnant, and (d) that there are no psychiatric grounds for termination of pregnancy. He was taken to task by Darby, Tredgold, Rhodes, Neustatter, Kay, and others in "letters to the editor" in the British Medical Journal for a constricted view of what constitutes psychiatric indications, for use of a highly selected sample, and for a dogmatic attitude.

In the American Journal of Obstetrics and Gynecology, Hammond (4) reported on ten years of experience with hospital sterilization and therapeutic abortion via "The Committee" approach. Under California law, which at the present time provided that there be no abortion unless the life of the mother was threatened, there were 18 applications and 12 approvals of which six were for psychiatric reasons. One case was for schizophrenia, one was receiving ECT and was four months pregnant, and five cases were suicidal. This represents a state ratio of one therapeutic abortion to 1,247 deliveries.

Irwin Desmond (2) recommends therapeutic abortion in cases where there are clear-cut grounds for believing that continued pregnancy will result in a recurrence of the schizophrenic reaction or where there is a previous history of puerperal depression with suicidal implications. However, he recommends initial hospitalization and treatment before consideration of abortion.

#### Neurotic Indications

Ekblad studied 479 females aborted for psychiatric reasons. After a 10 year follow-up, he reported that 58 percent could be described as having chronic psychoneuroses. The most common diagnosis was anxiety reaction or psychasthenia (36 percent). Under reasons for desiring abortion were the number of children already born, the wishes of the parent concerning the present pregnancy, the family situation, marital relationships, and socioeconomic status (3).

The Swedish abortion law, introduced in 1938, enacted in 1946, and amended in 1963, makes allowance for abortions for socioeconomic reasons. Indications in the Swedish law are:

(a) Medical: disease, defect, or weakness (physical or mental) in the mother.

(b) Medico-social: existing weakness or debility of the mother.

(c) Anticipated weakness: i.e., if pregnancy, delivery, and additional child are likely to lead to serious mental disease or sequelae.

(d) Humanitarian: verified rape.

(e) Eugenic: risk of severe mental or somatic disease being transmitted to the offspring.

(f) Other: rubella, Thalidomide, and emergency.

There is some controversy both in England and the United States as to whether or not such indications as number of children, attitude toward the pregnancy, family and marital situation, and socioeconomic status rightly belong to the domain of the psychiatric clinician. Sim (8) feels they do not and that to extend the indications so broadly means that therapeutic abortion then depends on the personal attitude of the psychiatrist, the whims of the patient, and the social climate rather than on established clinical facts.

There is some evidence to substantiate Sim's contention. Niswander, Klein, and Randall (7) found a wide disparity in the incidence of therapeutic abortions among clinic and private patients. They reviewed 504 therapeutic abortions accomplished between 1943 and 1964. Abortions for psychogenic reasons rose from 13 percent of the total abortions in 1943 to 87.5 percent of the total in 1963. Similarly, the incidence of therapeutic abortions among private patients rose from 4.0 per 1,000 deliveries to 9.6 per 1,000 with an average of 5.7 per 1,000 deliveries, and the incidence among clinic patients decreased from 3.9 per 1,000 to 0.3 per 1,000 with an overall average of 2.2 per 1,000. Also in the years 1960 through 1964, 75 percent of private patients were aborted for psychiatric reasons. During the same period, only one clinic patient was aborted and that was for epilepsy. It is

difficult to assume that clinic patients are emotionally more stable than private patients.

In New York municipal hospitals during 1951 to 1953, the therapeutic abortion rate was the lowest of all New York hospitals being 1/5 the rate of private and voluntary non-profit hospitals. In California hospitals in 1950 the abortion rate varied from 1 per 52 deliveries in one private hospital to 1 per 8,000 in Los Angeles County Hospital. Presently, it is estimated there are 18,000 therapeutic abortions in the United States annually. The vast majority occur among the affluent, educated, middle and upper classes.

Rhodes, in answer to Sim's article, takes the opposite view. He feels that socioeconomic factors, personal attitudes, and climate of opinion may be as important as strictly clinical grounds. Cultural opinion is shifting toward a position where abortion is socially acceptable. Neustatter, also in a rebuttal to Sim, asserts that socioeconomic factors are rightly a part of the physician's domain.

The more extreme proposals based on sociologic and psychologic reasoning proceed toward abolishing nearly all laws on abortion performed by a physician. They would consider unfitness of a woman to care for her child; right of a child to be born, wanted, loved, and accepted by mother, family, and society; the right of a woman to determine and control her reproductive function; and society's need to prevent the birth of defective children.

Tredgold states that in determining whether or not therapeutic abortion is to be done, there are two main questions: (1) Will the patient's health break down irretrievably if pregnancy continues, and (2) Will the patient commit suicide. Other related questions are the patient's ability to stand stress. This must include an assessment of the stress to be met (Sweden--social stress is sufficient; England--damage to one's health) and the probable effects of refusal.

#### Depression and Suicide

In terms of depression and suicide, we find that in three large series of cases studied in Sweden, none of the females who threatened suicide actually did so. Again, in Sweden, a seven year follow-up of 249 women who were refused legal abortion, there were no records of suicide or attempted suicide. A New York study revealed that suicides among

pregnant females were less than 1/10th the rate of the total female population.

Ekblad (3) considered the risk of both illegal abortion and suicide greatest in the female who was deserted by the male and fearful for herself and the child's future.

Sim (8), in his study of puerperal psychosis, quotes Lindberg to the effect that of 304 females refused abortion, and of 62 who threatened suicide, none did. He also refers to Dahlgren's study of suicide and attempted suicide where only 3.7 percent of the females in the series were pregnant. The coroner of Birmingham, England, reporting on 119 cases of suicide in females up to age 50 of whom 22 were unmarried, found that none were pregnant although two thought they were.

Studies from Scandinavia should be applied with caution because of the vastly different cultural attitudes, particularly, as regards the pregnant unmarried female. For example, the unmarried pregnant female in Denmark rarely seeks therapeutic abortion. There is no stigma attached, and she is entitled to all social and health benefits as her married counterpart. In contrast, Niswander's study in two Buffalo hospitals showed that the incidence of therapeutic abortion in the non-married rose from 4.5 to 22.2 per 1,000 deliveries (7). Reasons for abortion in this group were 93.7 percent psychiatric.

#### THE SEQUELAE OF THERAPEUTIC ABORTION

The literature on the sequelae of therapeutic abortions was reviewed by Simon and Senturia (10) for the period 1935 to 1964. They concluded that there were important deficiencies in most papers in terms of representative sample; no attention to the preabortion status of the woman; little distinction between the spontaneous, illegal or therapeutic abortion; little attention paid to the elapsed time between the abortion and follow-up; and so forth.

A report by the Council of the Royal College of Obstetrics and Gynecology in 1966 also concludes that published reports on therapeutic abortion are out of date, contradictory, and possibly prejudiced.

Nevertheless, Ekblad (3), reporting on a 2 1/2 to 3 year follow-up of 479 females who received a therapeutic abortion for psychiatric reasons, found that 64 percent had no regrets,

14 percent had mild guilt, and 11 percent regretted it. He concluded that legal abortion entails guilt and self-reproach for many females. However, the sequelae are not serious enough to become pathologic or to affect functional capacity. Arens reported a follow-up of 100 women who had legal abortion after 3 years. He found 23 percent with severe guilt and 25 percent with mild guilt. In a study of 84 females over 2 years, Malmfors reported 45 felt embarrassed and distressed while 39 had no effects. Overt guilt was experienced by 22 percent, and 10 percent had impairment of mental health with neurotic symptoms and depression.

Simon, Senturia, and Rothman (11) studied 46 cases who had a therapeutic abortion over a 10-year period. Of these, 16 had it for therapeutic reasons. Thirty-two of 46 had diagnosable psychiatric illness. However, 30 of the 32 had evidenced psychiatric illness prior to abortion. Their conclusions were: (1) Psychiatric illness occurs after therapeutic abortion but is not primarily related to abortion itself, (2) Only one of the six hospitalizations was related to abortion, and (3) Females aborted for psychiatric reasons are not an especially vulnerable group for development of psychiatric illness following abortion (4), and abortions do not tend to make things worse.

Kummer (6) reported on a poll of 32 psychiatrists. Of these, 75 percent had never experienced cases of moderate to severe psychiatric sequelae of abortion in their practices while 25 percent reported this happened rarely. The highest figure was six cases in 15 years of practice. On the other hand, of 100,000 female admissions to hospitals in the United States, 2 percent were precipitated during pregnancy or during the postpartum period giving a rate of one postpartum psychosis for 100 births. Surprisingly, Kummer quotes Ekblad, "No psychiatric aftereffects of moderate or severe degree among 30,000 legal abortions performed over 15 years." He concludes that abortion is of only minor significance as a precipitating stress toward moderate to severe psychiatric illness.

In his series, Sim (8) reported four postabortive psychoses. He quotes Ekblad also, "The more psychiatric indications for abortion the greater the risk of unfavorable psychic sequelae after abortion." Other studies previously mentioned note incidence of severe guilt varying from zero to 59 percent while still other studies report not only clinical signs of guilt but changes in attitude toward the husband usually involving hostility and rejection.

### THE SEQUELAE OF NONABORTION

In order to evaluate sequelae in women having abortion, it is desirable to consider the effects of refusing desired abortion. In a Swedish study of 142 patients to whom abortion was authorized but not carried out, 3 to 5 years later, in 89 percent (127) the decision to bear the child was justified. In 15 cases, therapeutic abortion was advisable, and in retrospect, probably should have been done. It was concluded that usually the woman's psychiatric condition and situation were judged to be more serious than was warranted, and a more stringent evaluation of psychiatric and social-psychiatric conditions should be done before permission is granted.

Hook (5) studied 249 females who had been refused a legal abortion seven years later. Of these, 86 percent went to term and delivered; 3 percent experienced a spontaneous abortion; and 11 percent had an illegal abortion. Twice as many unmarried women had secured an illegal abortion as those married. Twenty-five percent accepted refusal satisfactorily while 50 percent experienced serious emotional problems, but the majority made a good final adjustment. He considered 2/3 well adjusted; 1/3 were not so well adjusted and probably would have been better off with a therapeutic abortion. Further results in this same study showed that 24 women deteriorated so much that abortion was granted, 28 had an illegal abortion, 30 gave the child away, 17 were granted sick leave for mental illness within 18 months of delivery, 32 took sick leave later, and 68 wished that they had been granted the abortion.

This same author did a 12 year follow-up on children of mothers who were refused termination of pregnancy. He found no significant difference in the incidence of mental disturbance in these children than in a similar control group.

### MORTALITY, MORBIDITY, MORALITY, LEGALITY, AND OTHER CONSIDERATIONS

Abortion is not without its morbidity and mortality. Mortality rates in Scandinavian countries vary from 0.9 to 3.5 per 1,000. Denmark, 0.7 per 1,000; Eastern Europe, 0.3 to 0.6 per 1,000. Serious complications of 3 percent to 15 percent have been reported. With advancing medical knowledge and its application in the treatment of patients, the medical/

surgical indications for therapeutic abortion have decreased. In the Buffalo hospital study, there were no therapeutic abortions for tuberculosis after 1958. Cardiovascular indications also declined. In the 1943 to 1953 period, 20 percent of therapeutic abortions were for cardiovascular diseases. After 1960, there was only one case aborted for cardiovascular reasons. Rubella and psychogenic indications have shown a steady increase: rubella from a small fraction to 36.4 percent in 1964 (presence of epidemic), and psychogenic from 13 percent in 1943 to 87.5 percent in 1963. In New York state, therapeutic abortions in a 10-year period for psychiatric reasons rose from 8.2 percent to 40 percent. In California hospitals recently, over 50 percent of the abortions were for psychiatric reasons. Bolter (1) states that most cases (except rubella) of therapeutic abortion performed in the United States are for psychiatric reasons and of dubious legality. Niswander (7), in the Buffalo study, reached the conclusion that practices there reflect a very liberal interpretation of the law. Bolter also reminds us that there may be psychiatric contraindications, and we should look for these rather than the indications.

Those who advocate liberalization of the abortion laws assert that so doing would decrease the number of criminal or illegal abortions. This is not necessarily so. The Council of the Royal College of Obstetricians and Gynecologists states that in Hungary and Czechoslovakia, in 1961, following liberalization of abortion laws, the number of criminal abortions admitted to the hospital was approximately the same as in the years before laws. Hook (5) reports that the liberal laws of Sweden have not reduced illegal abortions significantly. The Royal College report also states that the easy availability of legalized abortion in Japan did not decrease the incidence of criminal abortion as it rose along with the incidence of legalized abortions.

The incidence of criminal abortion has been given at various levels of magnitude. In the United States, one million per year is a common estimate. In Britain, figures range from 50,000 to 250,000 a year. The Royal College doubts the validity of these "estimates." By compiling death rates from criminal abortions which are easier to obtain and more valid, and projecting these figures, the death rate of about 0.3 per 1,000 criminal abortions is obtained which is better than that achieved by the highly skilled obstetricians and gynecologists in British hospitals. This lowered death rate obviously reflects a much lower incidence of criminal

abortion. The same skepticism can be voiced about the estimations of criminal abortion in the United States.

The fact that a certain percentage of women who receive therapeutic abortions manage to become pregnant again within a short time also casts some uncertainty about the indications. A study in Japan revealed that 20 percent of those women who were aborted were pregnant again within six months and 50 percent within 12 to 18 months. A study in Sweden revealed that 38 percent of the women aborted had a second pregnancy within two years. In Czechoslovakia, 50 percent were pregnant and had a second abortion in two years following the first abortion, and 12 percent had three abortions in two years.

Proposed reforms and those already enacted in some states may bring about new sources of legal action against the physician. There was a recent case of a physician who was sued unsuccessfully because he did not recommend an abortion for a woman exposed to rubella!

From a moralistic and legalistic standpoint, three basic reasons are advanced for reforming abortion laws: (1) to protect the physician, (2) to facilitate abortion in deserving cases, and (3) to prevent women from being humiliated.

There are at least two Christian principles involved, namely, the sanctity of human life and compassion. The question involved in the principle of sanctity is whether anyone has the right to terminate life once it has been conceived, or should the present rigidity of the law be relaxed to make termination of life legal under the principle of compassion. Many religious factions would necessarily be opposed to amending such laws to the point that abortion would be a mere matter of choice. Certainly anything which tends to undermine the sanctity and the value of a human life should be looked at very carefully. Another core issue is to define the sanctity of a fetus. Here, the ideal solution would be a clear scientific ruling precisely defining "human life," and this apparently is not forthcoming.

Clearly, most abortion law reforms are based, in large part, on the principle of compassion. In Britain, the "Offenses Against the Person Act" does not recognize therapeutic abortion except by implication and case law. A Mr. Bourne, who terminated a pregnancy resulting from the rape of a young girl, was charged under this act. He was

acquitted on the grounds that he was justified in that the continuation of the pregnancy would have been detrimental to the future mental and physical health of the girl.

In 1939, in Britain, the Birkett Committee recommended "that a medical practitioner is acting legally, when in good faith, he procures the abortion of a pregnant woman in circumstances which satisfy him that continuation of the pregnancy is likely to endanger her life or seriously impair her health."

Lord Silkin pointed out that the medical indications for terminating pregnancy are becoming fewer as science progresses, and the most pressing demands for abortion are on psychologic or socioeconomic grounds. In 1966, he introduced a bill that would authorize abortion where: (1) physical or mental health of the mother would be endangered by continued pregnancy, (2) the child would be likely to suffer from mental or physical abnormalities, (3) the woman was inadequate to be a mother, or (4) the mother is mentally defective or was conceived under age 16 or as a result of rape.

There are several states which have reformed abortion laws and many more who have changes under consideration which will permit legal therapeutic abortion under similar conditions, namely, impairment to mental or physical health of the mother or child and conception due to rape or incest.

The American Medical Association position is to permit therapeutic abortion where the following conditions are met:

- (1) Documented medical evidence that continuance of pregnancy may threaten the health or life of the mother.
- (2) Documented medical evidence that the infant may be born with incapacitating physical deformities or mental deficiency.
- (3) Documented medical evidence that the pregnancy resulted from legally established statutory or forcible rape or incest and may constitute a threat to the mental or physical health of the patient.
- (4) Concurrence of two other physicians (relative to the medical evidence).
- (5) The abortion be performed in an accredited hospital.

The military position follows along these same lines in that paragraph 21a(2) of AFR 160-12 states that therapeutic abortion will be done only where medically indicated and permitted by law. This latter statement, "permitted by law," presents problems to the Air Force physician because he must be aware of the extent of local (county, state) jurisdiction at his particular Air Force base. For example, on some bases the federal government has complete and sole jurisdiction while on other bases there may be concurrent jurisdiction where the Congress exercises jurisdiction with the state. Some bases may be on leased land where there has been no ceding of legislative jurisdiction by the state to the federal government.

#### SUMMARY

In summary then, the issues surrounding therapeutic abortion are indeed complex. Aside from the moral implications, legal issues demand a careful knowledge of local law and jurisdiction for the military physician. For the psychiatrist, the increasing emphasis on compassion for the mental and emotional health of the patient and child will continue to make heavy demands on his professional judgment in the matter of therapeutic abortion.

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## THE PSYCHIATRIST ON TRIAL?

Robert P. Benvenuti

In 1843, when the House of Lords accepted "psychiatric" testimony in the "most important sanity trial of all time" (2), the trial of Daniel McNaghten, a marriage of sorts was created. The partners, Law and Psychiatry, though friendly, were hardly compatible. But like so many marriages of that day, need, convenience, and respectability were valued much more than love.

Each of the partners matured somewhat independently. The marriage did not flourish, but it did function; and, whereas love did not develop, a certain kinship did which allowed each the satisfaction of their basic needs. Even as the times changed and their outlooks differed more dramatically, they continued the relationship because each had something which the other craved. Law needed an understanding of criminal behavior to be more effective in his judgments and dispositions, and he offered his mate social status and respectability. Psychiatry needed the sense of social importance her mate offered, and she gave her knowledge of human behavior more than readily.

Both partners labored constantly to use each other appropriately, but the inevitable problems arose. Law criticized Psychiatry because she was unstable, vague, inconsistent, and meddled too much in his affairs. In spite of his complaints, it was obvious to Psychiatry that he had great need of her. Yet Psychiatry felt that Law was too set in his ways, too demanding, and aloof. She often thought that Law needed her more than she needed him, and in doing this, was always able to renew her zeal to better the marriage. But the marriage was a tenuous one. It was a marriage of convenience, though sometimes fulfilling; a marriage without warmth, though sometimes productive. It was hardly a marriage, but then, those were the marriages of that day.

Arguments between the partners continued to be as heated throughout the marriage as they were in the beginning. These same arguments repeatedly threaten the marriage today.

Wiseman (8), in a thorough analysis of the Cooper case, expresses the view that psychiatrists should not participate in any stage of the legal proceedings. Szasz argues that . . . "psychiatric participation in criminal trials, at least presently practiced, runs counter to our entire concept of the ethics of a secular democratic society" (6). Cumming feels that the marriage suffers from lack of real communication and states:

"Unfortunately the disputants do not approach the problem (of the extent to which mental abnormality should relieve from responsibility for crime) from the same point of view, using the same concepts and trained toward the same orientation toward the requirements of society. (Law) sees the question as one to be met within the framework of the legal procedures established for orderliness in human relations. (Psychiatry), on the other hand, has a different sense of social responsibility. (Her) approach is from the doctor-patient relationship--a personal relationship requiring only the diagnosis and treatment of a particular disorder of an individual. From (her) training and by reason of (her) professional obligations (she) must necessarily be preoccupied with the patient and his disease. This results in an attitude of solicitude toward the person. (Law's) attitude however is oriented toward the body social and the problems arising from friction in human relations. The solution of those problems cannot be varied in individual cases without chaos in the administration of justice" (1).

Watson (7), on the other hand, feels that the marriage should continue. He maintains, while discussing the Durham decision, that it . . . "will facilitate greatly the disposition of criminal offenders in whom there is mental illness." Overholser (4) is also against divorce between Psychiatry and Law. He is . . . "optimistic for the future . . .," in spite of the criticisms.

Into this frustrating and discordant marriage the Air Force psychiatrist is led. He not only sees and feels the seemingly perpetual conflict between Law and Psychiatry, but he is also plunged into the battle whether or not he approves of the role. His attitude, though usually fresh, is biased as he has had little experience or training in Forensic Psychiatry. He is anxious, and in seeking defensive strength,

his bias increases as does his anxiety. He often fails to realize that the question of whether the marriage between Law and Psychiatry should prevail is not moot as far as he is concerned. He must evaluate people who are charged with criminal activity. He must testify as an expert in the military court. There is no escape for him. His only recourse is to become proficient in evaluating those accused of crimes and in testifying in court. While others may discuss the merits of divorce or closer union between Law and Psychiatry, the Air Force psychiatrist is actively either encouraging mutual respect between Law and Psychiatry or unwittingly increasing the difficulties between the two partner professions. And although it may be true that psychiatric testimony in criminal proceedings does not always affect the outcome of the trial, it is nevertheless true that the respect for Psychiatry and the psychiatrist is always on trial.

Because there is no doubt that the Air Force psychiatrist will be participating in criminal proceedings, it is imperative that he becomes well-versed in the skills of evaluating an accused man and in testifying before the court. The concepts and procedural aspects of Air Force Psychiatry have been well-discussed by Giffen and associates (3) and will not be reiterated. Rather, our attention will be directed to a few points concerning the evaluation of the accused and the conduct while testifying. For a more detailed account, reference is made to Macdonald's text (3).

### EVALUATION OF THE ACCUSED

#### Records

It is well to remember that in the military more than elsewhere, any case may be subject to court action. Adequate notes are essential during the evaluation. These notes may be brought to trial and used as references by the psychiatrist to refresh his memory. Many an expert has forgotten even his AFSC number under the tension of the trial.

#### Rights

Prior to the psychiatric evaluation, Article 31 of UCMJ must be carefully explained to the accused, otherwise the evaluation is useless to the court.

### Physical

Perhaps more appropriately, the physical examination should precede the evaluation. The necessity of a physical need not be commented upon.

### Present History

This part of the evaluation should include the thoughts, feelings, and behavior of the accused, prior to, during, and after the alleged crime. Special attention must be given to the details of the alleged crime. No detail is insignificant. During the trial of a man accused of beating his infant daughter to death, the physician testified that the man suffered from a mental illness diagnosed as a fugue state. On cross examination, however, the psychiatrist had no details to support his diagnosis. The court was confused, the physician was embarrassed, the respect of Law for Psychiatry diminished, and the accused may have been affected by this error.

### Outside Sources

The psychiatrist should examine all sources of information other than the accused for discussion with the accused. Written confessions, commander's reports, and witness accounts of the crime are sources of information which can be discussed with the accused for further understanding of him and the crime.

### Past History

Past history is most often revealing and important though the manner in which it is used is subject to the court's discretion. Certainly, if a man accused of beating another almost to death, is found to have always been an impulsive person who was ordered to join the Air Force by a civil magistrate or "go to jail," some thread of doubt is cast upon his being an "average and typical" American teenager who went "temporarily insane."

### Length of Evaluation

No amount of time can be set for the conducting of a proper evaluation. The court is however naturally suspicious of psychiatric testimony based on one short session with the accused, and it easily recognizes the fact that even the dullest criminal can fool the wisest psychiatrist if given a brief enough interview. The importance of a well-organized,

complete psychiatric evaluation cannot be stressed enough. It must be accomplished with thoroughness, conscientiousness, and objectivity. It is the well-prepared evaluation which enables the psychiatrist to testify with confidence and authority.

### TESTIFYING BEFORE THE COURT

Sadoff and others (5) learned recently that 2/3 of the psychiatrists they questioned felt that court appearances were "purposeless and a waste of time." Perhaps much of their feeling stems from anxiety related to testifying. There are few places other than the courtroom where the psychiatrist is as acutely challenged. There is no place other than the courtroom where the image of Psychiatry and the psychiatrist is more dramatically "on trial." The criminal court is a real life drama in which no one escapes scrutiny. The expert witness may speak to the court concerning an accused's mental state, but when he does, he speaks about himself and his profession. It is understandable that anxiety may be initiated by the call to the witness stand. Some comments concerning testifying will be given to refresh our minds.

#### Professional Attitude

A professional attitude can be defined as a bearing which conveys honesty and objectivity, and which encompasses behavior directly related to the question at hand. Personalities of those in the courtroom, other than that of the accused, must be ignored. A psychiatrist was testifying as to the personality of an accused homosexual. The court was unusually harsh and obviously prejudiced against the accused. The physician was caught off guard when the court remarked that the accused would soon be teaching his perversion to small children. He answered in the negative, but a derisive smile revealed his attitude to the court. Needless to say, the court showed no disrespect to the psychiatrist--only a total disregard for his carefully prepared testimony. The court is human. It is not above subtle provocations. He who plays "get even" with the court loses, as does his cause.

The old saying that "each man will have his day in court" is not intended to apply to the expert witness (at least not during his participation as an expert). "Soap-boxing" or "preaching" is not an uncommon tendency among psychiatrists, probably because of the "captive audience effect." It would probably serve society better if those

psychiatrists confined their thespian talents to less serious surroundings. Answering questions as concisely as possible is what is expected. If the court is interested in a more detailed and effective explanation, it will most assuredly request it.

#### The Role Change

For the psychiatrist, the witness stand is an antithetical experience. The interrogator becomes the interrogated. Old, supposedly worked through, anxieties have a way of returning under the stress. Stuttering, loss of words, or pressured speech can occur while testifying unless each answer is carefully thought out prior to speaking. Preparation for testifying is a dynamic process which ceases only after the last question is answered completely.

#### The Language

Wiseman (8) has written a paper which beautifully demonstrates the ridiculousness of professional jargon in the courtroom. It was after hearing the testimony of nine psychiatrists and three psychologists that he was prompted to politely express the wish that psychiatric witnesses not be allowed in the courtroom. We cannot expect even the most sophisticated layman to understand terms by which we ourselves, when honest, are confounded. If the psychiatrist cannot explain what he has learned about the accused in understandable language, then he convicts himself of the crime of "uselessness."

The task of the psychiatrist in the witness stand is to give the court his knowledge of the accused's state of mind: to help the court understand the accused so that it may better judge him. Behavior in the witness stand must be directly related to that purpose or it is superfluous. All superfluous behavior in court serves to interfere with the marriage between Law and Psychiatry, which, after all, was a marriage designed more out of need to better serve both the community and the individual, than out of any personal need. Let's not push the old folks into a divorce until we've established a more useful mate for the Old Man Law.

#### SUMMARY

Ever since Psychiatry has proven itself useful in understanding criminal behavior and in assisting the Law's

disposition of the criminal, the two disciplines have labored to lessen the misunderstandings which have naturally arisen because of the partnership. There is constant concern over the conflicts between Psychiatry and the Law in the literature, but little attention has been given to the individual psychiatrist who, unwittingly, often generates or increases these conflicts.

The psychiatrist, by reason of a poor preparation or an unprofessional attitude while on the witness stand, does not always affect the outcome of a trial, but he does always promote the difficulties between Psychiatry and the Law. Thus he increases the misunderstandings between the two professions, encourages the court's suspicion of Psychiatry, and loses the Law's respect for his profession and himself.

The young Air Force psychiatrist has, in general, had little training in Forensic Psychiatry and is therefore prone to the mistakes which interfere with the necessary and purposeful cooperation between Psychiatry and Law.

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## MILITARY AEROMEDICAL EVACUATION AND PSYCHIATRIC PATIENTS

Frank W. Hayes

The primary purpose of military psychiatry is to assist in the preservation of the effective fighting strength of the Armed Forces. Through a statistical study on all patients in the aeromedical system that entered Travis AFB, California, from 1 January to 30 January 1967, an attempt is made to determine the percentage of psychiatric patients to total patients by individual military service. Further analysis of the statistics is accomplished, and the percentage of patients with psychoses, neuroses, and character defects of the total number of psychiatric patients is determined. The validity of transfer aeromedical diagnoses of Air Force patients terminating at David Grant USAF Hospital is explored and the patients' dispositions discussed. Studies during World War II and the Korean Conflict as well as present policies are utilized in assessing the effectiveness of present day preventive psychiatric practice in the primary, secondary, and tertiary realms. An effort is made to determine if there is a direct effect of the Vietnam Conflict upon USAF psychiatric patients evaluated and treated at David Grant USAF Hospital.

### AEROMEDICAL EVACUATION

The first known aeromedical evacuation effort was by two military officers in 1910 (8, 12). In World War I, the airplane was used on relatively few occasions for evacuation of casualties (12). During World War II, the Army Air Corps repeatedly demonstrated that casualties could be transported safely by air faster and more efficiently than by other modes of transport (12). Although aeromedical evacuation was not the primary official mode of medical evacuation in World War II, approximately 1,333,000 military patients were transported by this means (1).

Since 1949, the Defense Department policy has dictated use of airlift for the sick and wounded whenever possible (3, 4, 12). Though American war casualties can arrive at Travis Air Force Base from Vietnam in 17 hours or in 10 hours from Japan, aeromedical flights are not limited to casualties

from the combat zone. The Air Force operates an extensive network of aeromedical activities throughout the world. Statistics on casualties and diseases help military planners decide assignment of specialized personnel, but the ultimate criteria of success or failure of the aeromedical system must be the flexibility and knowledge of all medical personnel as well as their organization (3, 4, 12).

All of the Armed Forces have hospitals and other medical facilities in various areas of the world to treat, as soon as practical, all medical, surgical, and psychiatric patients resulting from war, accidents, disease, or other mishaps. Each service attempts to maintain the effective fighting potential of its men whether directly involved in combat or functioning in a supportive role.

When men are felt to be incapable of continuing to function because of a medical, surgical, or psychiatric condition, and it is felt that significant rehabilitation cannot be accomplished in the overseas theater of operation, they are aeromedically evacuated to the continental United States (ZI) for final evaluation, treatment, and disposition. The medical flights from the Pacific area to Travis Air Force Base is by C-141. The C-141, primarily a cargo plane, can be refitted with aeromedical supplies and equipment within 25 to 40 minutes. It can carry up to 80 litter patients, 124 ambulatory patients, or a combination of both (4). This impressive four engine jet flies at speeds up to 485 miles per hour and has a nonstop range in excess of 5,500 miles (4).

Travis Air Force Base is the medical aerial port for the Pacific area. Most C-141 flights carrying United States Air Force, United States Army, United States Navy (including Marines), and civilian patients being returned to the hospitals in the western part of the United States terminate at Travis. Once patients arrive at Travis, their continued transportation becomes the responsibility of a domestic aeromedical system (3), or they are admitted to this hospital for definitive care.

David Grant USAF Hospital serves as a consultation center for several USAF bases and sites in ten western states. This hospital, located at Travis AFB, California, has 400 active treatment beds and an additional 198 beds under the control of the Second Casualty Staging Unit (CSU). The Department of Psychiatry at this hospital maintains 80 active treatment beds. There are 10 additional beds for boarding of psychiatric patients who are to continue in the

air-evacuation system and who must be restrained and sedated (1A), or only restrained (1B) during transportation by aircraft. The rest of the transient psychiatric patients (1C) are medically attended in the Second Casualty Staging Unit at Travis.

#### CLASSIFICATION OF EMOTIONAL DISTURBANCES

The United States Air Force and the United States Army regulations relative to psychiatry recognize two distinct types of emotional and mental disturbances. These two categories are based on the separation of character and behavior disorders from the service-recognized mental disorders of psychosis, neurosis, impairment of brain tissue function, and psychophysiologic, autonomic, and visceral disorders.

For purposes of this paper, transfer diagnoses of adult situational disorders are classified as character and behavior disorders. It has been our experience that once Air Force men with transfer diagnoses of situational psychiatric conditions arrive at Travis, they manifest primary personality trait disturbances, usually with a passive-dependent or passive-aggressive hue. The number of psychophysiologic disorders was not statistically significant, but these conditions were incorporated into the broad category of the neuroses for completeness in reporting procedure. Cases of combat exhaustion were also not statistically significant but were placed in the character and behavior category. During the period of the report, there was one case of combat exhaustion aeromedically evacuated by the Army, five by the Navy, and none by the Air Force. Alcoholics, aeromedically evacuated and classified in the character and behavior disorders, constituted 2.2 percent of the Air Force's psychiatric patients, 2.2 percent of the Army's psychiatric patients, and 2.9 percent of the Navy's psychiatric patients.

#### PSYCHIATRIC PATIENTS IN THE AEROMEDICAL SYSTEM

The Pacific area statistics reflect patients from all bases west of the West Coast of the United States. Though the patients from South Vietnam are included in the statistics under the Pacific area, only 11.3 percent of Pacific area Air Force psychiatric patients seen on our wards originated in South Vietnam. Based on the number of assigned personnel in the Republic of South Vietnam, this 11.3 percent

represents a rate of 1.8 psychiatric patients per 1,000 men per year.

From the Pacific area, the Armed Forces aeromedically evacuated through Travis, 5,051 patients; 12.9 percent of these patients had psychiatric transfer diagnoses. An examination of the figures from individual branches of the Armed Forces reveals that 17.4 percent of the Air Force's, 6.7 percent of the Army's, and 17.7 percent of the Navy's total evacuees were psychiatric patients. Since Navy medical personnel are assigned to Marine units and medical care of Marines is usually accomplished in Navy medical facilities, all Marine casualties are incorporated in the statistics on Navy personnel. Of the civilian casualties, 6.6 percent were psychiatric.

Analysis of the transfer aeromedical diagnoses on patients from the Pacific area reveals that 57.8 percent of the total number of Air Force psychiatric patients were psychotic, 24.5 percent were neurotic, and 17.6 percent had character and behavior disorders. Of the Army's psychiatric patients, 73.6 percent had psychotic diagnoses, 14.2 percent had neurotic diagnoses, and 11.5 percent had character and behavior diagnoses. The United States Navy transferred 18.9 percent of their psychiatric patients with psychotic diagnoses, 27.6 percent with neurotic diagnoses, and 53.5 percent with character and behavior diagnoses.

Of interest in the Navy was the fact that the number of psychiatric casualties remained fairly constant as the total number of patients increased. During this period there was no significant trend for the Air Force either in the total number of patients evacuated or the relative percentage of psychiatric patients. Though the total casualties for the Army in the last four months was twice the average of the first two months of the report, the percentage of psychiatric patients by month varied between 3.5 percent and 9.6 percent with no significant trend being noted.

In the domestic (ZI) aeromedical transportation system, 618 Air Force, 423 Navy, 479 Army, and 458 civilians landed at Travis. Of those having primary psychiatric diagnoses were 9.5 percent of the total Air Force patients, 15.2 percent of the Army patients, 24.3 percent of the Navy patients, and .22 percent of the civilian patients. Although the Army did have a relative increase in the percentage of psychiatric patients transported, none of the branches of the Armed Forces was considered to have shown a significant trend in either

the total number of aeromedically transported patients or the percentage of psychiatric patients.

On the basis of transfer, aeromedical diagnoses of psychiatric patients in the domestic system, 44.1 percent of the total number of Air Force psychiatric patients were psychotic, 18.6 percent were neurotic, and 27.1 percent had character and behavior disorders. Of the Army's psychiatric patients, 54.8 percent had psychotic diagnoses, 19.2 percent had neurotic diagnoses, and 20.5 percent had characterologic defects. The Navy transferred 51.2 percent of their patients with psychotic diagnoses, 15.5 percent with neurotic diagnoses, and 22.3 percent with character and behavior diagnoses.

#### DEFINITIVE DIAGNOSIS AND DISPOSITION

In the Department of Psychiatry at David Grant USAF Hospital, all psychiatric patients are presented at an intake conference attended by all ward psychiatrists, the chairman or assistant chairman of the department, the psychiatric nursing supervisor, the three ward charge nurses, and selected technicians. At this conference a detailed history and mental status are presented on each patient by his attending psychiatrist. If there is a question as regards a patient's diagnosis or disposition, he is presented to a diagnostic board comprised of a minimum of three psychiatrists, after all psychologic test results, staff observations, and consultations required are collected. All patients with neurotic or psychotic diagnoses meet a medical board.

There was considerable agreement between the definitive diagnoses made at the David Grant USAF Hospital and the transfer diagnoses on patients from the Pacific area and Europe. On patients received from Tachikawa (Japan) and Wiesbaden (Germany), large overseas consultation centers, where the chairmen of the psychiatric departments are regular Air Force psychiatrists, there was almost a 100 percent concurrence with the transfer diagnoses.

The concurrence by our staff with transfer diagnoses from smaller bases with military psychiatrists, though less than with other large consultation centers, was significantly higher than with bases without military psychiatrists. Some of the smaller bases without Air Force psychiatrists have contract civilian psychiatrists that help evaluate their local populace.

On the basis of definitive diagnoses at this hospital, it was found that 56.8 percent of all psychiatric patients aeromedically evacuated to Travis from the Pacific area were psychotic as were 55.6 percent of the psychiatric patients from Alaska and Europe. Of those patients having a service-recognized psychiatric illness, 77.3 percent came from the Pacific area and 66.7 percent came from Europe and Alaska. From the Pacific area, 20.4 percent and 33.3 percent of our patients from Alaska and Europe were determined to have primarily character and behavior disorders.

After evaluation and treatment, 56.8 percent of all psychiatric patients were returned to duty. Of those returning to duty were 31.8 percent of the Pacific area patients, 44.4 percent of the Alaskan and European area patients, and 63 percent of the patients from the ZI. From the Pacific area, 38.6 percent of the patients were medically retired or separated while an additional 29.5 percent were medically retired but needed further hospitalization by the Veterans Administration; 38.9 percent of the Alaskan and European area patients were medically retired or separated and discharged while an additional 16.7 percent needed Veterans Administration hospitalization.

If patients diagnosed as having character and behavior disorders or having "no disease found" were eliminated from these statistics, 88.2 percent of the Pacific area patients and 83.3 percent of the European and Alaskan area patients had to be medically separated or retired; 38.2 percent of the Pacific area patients needed further care in a Veterans Administration hospital as did 25 percent of the European and Alaskan area patients, and 29.4 percent of the patients transferred from bases within the continental United States (ZI).

#### WORLD WAR II AND KOREAN CONFLICT PSYCHIATRIC CASUALTY STUDIES

The need for the Armed Forces to try to reduce ineffectiveness secondary to emotional disturbances is an outgrowth of a number of military experiences since 1900 (5, 7, 13, 15).

Dr. Karl Menninger was a member of a commission appointed by his brother, Brigadier General William Menninger, and the Surgeon General to study combat exhaustion in World War II. It was the conclusion of this commission that the picture of psychologic disorganization seen in combat casualties did "not correspond either in its moderate or in its

extreme form to any recognized or established psychiatric syndrome" (14).

A study by Dr. Albert Glass of psychiatric casualties in the Central Apenninis Campaign in 1944 revealed that over 1/2 of those men returned to combat by forward psychiatrists were effective in the performance of duty. This study further revealed that about 95 percent of the NP casualties that were returned to effective duty had satisfactory records prior to evacuation while only 6 percent of those with unsatisfactory records prior to combat were effective (5).

During the Korean Conflict, Glass stated that the clinical findings in a typical psychiatric hospital in Japan in 1950 were "those of a war neuroses and included free-floating anxiety, noise sensitivity, major hysterical syndromes, and irritable, aggressive behavior" (6). Experiences in World War II and the Korean Conflict demonstrate that effective and beneficial leadership, meaningful communication among members of a group, group identification, and commonness of purpose lower the psychiatric casualty rate of a combat unit.

When the percentage of psychiatric patients to total evacuees noted in this paper is compared with the percentage of psychiatric casualties evacuated in World War II during the year 1944, all three branches of the Armed Forces have excellent records. However, during the Korean Conflict between September 1950 and May 1951, only 6.29 percent of all evacuated patients from Japan and Korea had a psychiatric diagnosis (7).

#### PSYCHIATRIC PATIENTS FROM 1 JANUARY TO 30 JUNE 1967

The United States Army, with its long history of experience with psychiatric casualties, its well-staffed and highly trained mental hygiene service, is again compiling an excellent record with only a 6.7 percent psychiatric aeromedical evacuation rate. This experience and organization is also reflected in the fact that 88.5 percent of Army psychiatric patients had service-recognized medical disorders. The Air Force had the impressive figure of 77.3 percent of all psychiatric aeromedical disorders from the Pacific area being admitted to Travis having service-recognized medical disorders.

The Army, as opposed to the Air Force, has a very close coordination among its psychiatrists in the Far East, and better control is thus possible. All borderline or ambulatory psychotics who are unable to function in the combat zone are sent to hospitals in Japan. From there they are reassigned to other areas in the Far East in order to complete their tour to avoid the continued aggravation of a psychiatric condition by unusual stress. Removing these men from patient status and keeping them in the Far East tends to alleviate some of their guilt secondary to leaving their combat units and removes the necessity of having them cling to their psychiatric symptoms as justification of their patient status.

This survey indicates that when compared to the Air Force and Navy, the Army's preventive psychiatric program is functioning in an outstanding manner. The marked effectiveness of their program is attributed to the Army's general philosophy toward emotional disorders and the close coordination and interplay between line units and the mental hygiene services at all bases. Statistics, as well as contact with the Army Mental Hygiene Program, reveal effectiveness in primary and secondary preventive psychiatry. The favorable results of the Army in the Korean Conflict have been attributed to better administrative preparation, changes in attitudes, and the prompt institution of proven psychiatric patterns of treatment and control (7). The Army in the Vietnam Conflict appears to be continuing their progressive policies with the confirmed knowledge that psychiatric patients, after being returned to combat, were almost as effective as other personnel returned after leaving the line for a variety of reasons (7).

No evidence of a war neurosis (11) or aggravation of a psychiatric condition by combat was noted among any of the Air Force psychiatric casualties transferred to David Grant USAF Hospital. Some patients felt that the separation from family and boredom were significant factors in their illness, but none blamed the war. Previous studies, however, showed that the number of schizophrenics that will appear each year per 1,000 men remains relatively constant in the military regardless of war or other circumstances (7).

In the United States Air Force, the percentage of psychotic patients aeromedically transferred to our wards from the Pacific area and Europe was almost identical, approximately 56 percent. From a study in the psychiatric clinic at David Grant USAF Hospital of 250 active duty

personnel selected at random, only 3 percent of the evaluatees were found to be psychotic (2). This would tend to indicate that a large number of neurotic, character defects, and non-diagnostic patients were seen and treated at smaller bases but not evacuated to the definitive care hospitals in the continental United States.

The overseas bases that do not have regular or career reserve Air Force psychiatrists introduced almost all the character and behavior diagnosed personnel into the aeromedical system. It is felt that this might result from a lack of knowledge, or acceptance, of the fact that the classification of character and behavior disorders as nonmedical conditions was based on many careful studies of psychiatric casualties in World War I, World War II, and the Korean Conflict. In fact, it was discovered that by September of 1943, the Army was losing almost as many men each month by psychiatric rejections and discharges as were being inducted (7).

It is Air Force policy to treat and return to duty all personnel that can contribute to the effectiveness of their unit. Though psychiatric intervention is used to assist personnel with characterologic defects when there are emotional crises, it is a policy that these men should be returned to their units as soon as possible. If, after attempts at rehabilitation, these military personnel are still unable to function effectively, their definitive disposition is a nonmedical function of their unit commander. All attempts at medical and nonmedical rehabilitation should be done at the local level or at the area medical consultation center. The majority of the character and behavior disorders are recognized, treated, or administratively handled by Air Force psychiatrists or other doctors at their local bases. In the diagnoses of these patients who are questionable from a nosologic standpoint, the emphasis in our department would be toward character disorders unless evidence of a psychosis or organicity were present. The fact that our diagnostic and medical boards concurred in the diagnoses by the two large overseas consultation centers, Wiesbaden and Tachikawa, in almost 100 percent of the transferred cases reflects the same emphasis by regular Air Force psychiatrists at other bases.

This study demonstrates the need for area consultation centers staffed with several psychiatrists and at least one regular Air Force psychiatrist. Our concurrence rate with the transfer diagnoses from bases without psychiatrists was very low, and in addition, 35 percent of the transfers from

these bases were ones in which the diagnosis was "NP observation." Of the admissions to our wards from the psychiatric clinic and emergency room at Travis Air Force Base, 45.6 percent were eventually diagnosed as character and behavior disorders. This figure reflects not only suicidal attempts or gestures and pretrial evaluations, but also a need for men to be treated in time of crises regardless of their official nosologic label.

In the Air Force, the percentage of Pacific and European area patients with service-recognized psychiatric conditions that were medically separated was 88.2 percent and 83.3 percent respectively while 72.5 percent of the patients originating from domestic bases were medically separated. These high percentages for medical separation after inpatient treatment are reflections of an effective screening and treatment program on an outpatient basis and at other hospitals. Only those patients who have demonstrated their ineffectiveness on repeated occasions are usually admitted. David Grant USAF Hospital is the final area Air Force treatment and disposition center. As a result, the percentage of patients returned to duty from this hospital is small because every attempt is made not to admit but rather to treat them on an outpatient basis. After our inpatients' psychiatric conditions are improved or are in remission secondary to intensive therapy by our therapeutic teams as well as other factors, those patients being medically retired are transferred to the Definitive Care Unit of this department (10). Their social and vocational transition to civilian life is then facilitated by our social work service (16).

#### SUMMARY

The statistics provided in this paper, as well as contact with Air Force and Army psychiatrists in the Pacific area, reveal that the mission of military psychiatry is being effectively performed. This objective is to function in the realm of primary, secondary, and tertiary preventive psychiatry and thus help maintain the effectiveness of the military man (9). Though preventive psychiatry is very effective in both the Air Force and Army, statistics indicate that the United States Army's program appears to be more effective.

Among the Air Force patient population at David Grant USAF Hospital, no direct effect of the war was reflected. This was felt to be because of good preventive psychiatric practice by Air Force psychiatrists in South Vietnam,

effective control by command surgeons and hospital commanders, group identification, rotation policies, rewards and recognition, leadership, discipline and adequate food, water, rest, shelter, and equipment in the Pacific area (6, 7).

Of all the admissions directly or by aeromedical transfer to our psychiatric wards, the majority are returned to duty. The return to duty after crisis intervention or rehabilitation not only helps increase the patient's self-esteem and prevents the entrenchment of psychiatric disability but also conserves effective manpower for the Air Force.

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THE RORSCHACH PROTOCOLS OF TWO CASES  
OF TRAUMATIC NEUROSIS OF WAR

Donald N. Bersoff

While many men develop mental illness during their tour of duty in a war zone, few develop what Kardiner (1) has described as traumatic neurosis, that is, a pathologic adaptation created by a self-preservative crisis due to the danger of destruction. Until joined by a colleague at Cam Ranh Bay, I was the only Air Force clinical psychologist in Southeast Asia serving from June 1965 to June 1967 at the USAF Hospital, Clark AFB, Philippine Islands, a clearing house for most patients air-evacuated from Vietnam. In that time, amidst a population of approximately 1,500 patients evacuated from Vietnam with psychiatric diagnoses, only two of these can be considered to have developed a genuine traumatic neurosis of war: a syndrome originating in an apparently functioning person and contracted acutely while engaged in actual combat during which the person was in realistic danger of losing his life. This is a rather restrictive definition but serves to eliminate the ambiguous and borderline patients who develop anxiety slowly in a situation where there is only a perceived threat of danger. The Rorschach protocols which I will describe were derived from two patients who were in genuine danger of being killed and who had little foreknowledge of the imminent threat to their existence.

These protocols were administered and scored according to the Klopfer method but are being reported in the manner of Roy Schafer with response and inquiry in contiguity.

CASE I

The patient is an 18-year-old, single, Caucasian, Marine private first class who was admitted to the Psychiatry Service following referral from the Department of Internal Medicine with symptoms of insomnia, headaches, dizziness, tachycardia, dyspnea, and concern over possible hearing loss. The patient had 18 months of service including Vietnam duty from May 1965 to February 1966. He experienced no symptoms throughout his assignment in Vietnam despite numerous skirmishes with the

enemy until he was involved in a grenade explosion on Christmas Eve. The patient is a radio operator and was exposed to an unexpected grenade attack; the resulting explosion sent him hurtling across an embankment causing him to hit his head and receive minor shrapnel wounds. The patient was attended to but the next day began experiencing symptoms of headache and dizziness. He was sent back to the receiving station where the symptoms continued with the addition of recurring nightmares about the traumatic experience. The patient was returned to duty (after his wounds were treated), but the nightmares, insomnia, and headaches persisted. After a month of these symptoms, the patient was sent to Clark AFB Hospital. After evaluation there, he was sent to the Marine Hospital at Okinawa for final disposition with a diagnosis of traumatic neurosis. His Rorschach protocol is as follows:

Reaction Time: 5" Total Time: 65"

Card I

- 1.\* (W F+ A) Some kind of a beetle, like a butterfly or something. >^ That's all I can make out of this one. (Urge) That's it. ((Wings, body and two little things sticking out here like feelers. Butterfly or beetle? More of a beetle. Well, hm, hm. Position? Like its landed on something, ready to take off.))

Reaction Time: 6" Total Time: 70"

Card II

1. (D FM+ A P) Looks like--could be two elephants, trunk on top here. ((Like in circus, touching each other's trunk, standing on two legs, ears.))
2. (D F- At) Can it be turned a different way? v Looks something like a rib cage (usual black) in a way. ^ That's it. ((Outline of person's body, heart, tube and pipe down in through here. Some kind of bone down here. Where see? X-ray. What suggests? Just outline. Suggests heart? In the center and all expanded out.))

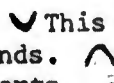

Reaction Time: 5" Total Time: 75"

Card III

1. (W M+ H P) That looks like two natives dancing, two natives. ((Looks like natives working in some

\*Inquiry is found within the double parentheses. Examiner's questions are underlined.

kind of pot. Looks like women, tell by the breasts, faces shaped like natives.))

2. (d F+ Ad) Two monkeys. ((Face part (usual H heads). ? Long nose, way eyes cut back in.))
3. (D FM+ A) These two red things look like cats. ((Like cat that's been scared, like you come up behind it, it'll look at you and jump. Position? Look like it's leaped off of something.))
4. (D F C+ Cg P) Red thing in the middle looks like a bow. ((I used to go with a girl who used to wear a red bow like that.))
5. (W F+ (A))  This looks like a monster with big eyes and hands.  That's it. ((Eyes are the big black parts. Expression? Mad, mean, angry about something, like it's after somebody.))

Reaction Time: 8" Total Time: 75"

Card IV

1. (W F- P1) Looks like a leaf or something. ((Dried up, fell off a tree, curling up on ends, looks like it's dead, was green and then dies.))
2. (W M+ H) Looks like some kind of body with feet. That's it on that one too. ((Like a clown or something, big flat feet, bending backward, on his heels, leaning back on some old log or something.))

Reaction Time: 5" Total Time: 80"

Card V

1. (W F+ A P) That looks like another butterfly there, kind of a moth. ((Looks more like a moth. Position? On ceiling or something.))
2. (W FM+ A) Could get a water bug. ((Like in Michigan. Just gliding over the water, wings push it across the water.))
3. (d F+ Ad) These things on the end look like a dog leg or something. That's it. ((Like on the run or something.))

Reaction Time: 5" Total Time: 70"

Card VI

1. (W Fm·Fc+ AObj P) Looks like some kind of a hide of some animal, bear or something, flattened out. (Rubs blot) Can't seem to get nothing out of it. ((The way the dark crease comes down, two paws, looks like mounted on the wall, straight, skin real tight. The head is up here with skin taken all off, real furry. Fur? Light coloring through edge and dark coloring.))

Reaction Time: 7" Total Time: 90"

Card VII

1. (D F+ Hd) These top things look like a head. ((Of a person. What kind? Couldn't tell, just outline of a person's head. ? Looks more like a man. ? Just the shape.))
2. (D FM+ A) Looks like a baby rhinoceros right here, (upper 2/3) horns sticking out. ((Hopping around. Baby? So small, tiny.))
3. (Reject) > Looks like some kind of lion this way. ((The lion? I don't remember the lion.))
4. (W F+ Symbol) √ Seen a marking like this over in Vietnam but I can't place it. That's it. ((On one of those tombs.))
5. (Dr F+ Ad) Bear head. ? Way eyes shaped, angry look on him. (Middle 1/3 without extension)

Reaction Time: 5" Total Time: 75"

Card VIII

1. (D FM+ A P) > These here can be some kind of mouse. ((Rat, shape of head. He's crawling around, got head down looking for something.))
2. (D F+ At) ^ Center part can look like rib cage. ((Way bones look. Where see? Over in Vietnam, friend of mine. Seen his chest blown out.))
3. (D F+ At) (laughs) Could look like a guy who's got his head all blown up. That's it. ((Saw this on a gook, a VC. Split open, fragmentation went through. Lip over front part but blown back over. Also see white tissue and bone. Upset you? Don't even like to look at the blot.))

Reaction Time: 30" Total Time: 115"

Card IX

1. (W CF Paint) √ Looks like somebody don't know how to paint. Kind of splattered around on this one. ((Like something I used to do when mad. Paint? Colors, different shapes.))
2. (S F- Ad) Center part looks like mass with two eyes, sheep or something. ((Sheep, Halloween or something. Expression? Can't place expression.))
3. (D F+ A) These two could look like a skeleton of a bird, rotted away for awhile. ((Parrot or something, feet here, skeleton of bone. Rotted away? Like eaten away by ants, bones right in there here, looks like it all shrunk.))
4. (Dr M- Hd) ^ This looks like a guy with a nose, two eyes, a thumb, throwing some rocks. ((Looks like he's throwing something, picked it up and just heaved it. Expression? Something you see in a movie, mean looking face, monster kind.)) (entire bottom pink, body in middle, rocks on ends, face in between pink and center space form)

Reaction Time: 8" Total Time: 75"

Card X

1. (D F+ AdP) This little part here looks like a rabbit, face and ears.
- 2-3-4. (D FM+ A)-(D F+ A P)-(D F+ A) Looks like different crabs in picture. ((Legs coming out, feelers, looks like picking at something, seaweed. (top mid gray) Legs sticking out all over, looks like he's hurt, lost one of his pinchers. (side blue) Same with this one here (outer gray-brown.))
5. (Reject) √ Couple of frogs. ((Can't find them now.))
6. (D F+ A) Sea horses, too. Mostly sea life except for that rabbit. (bottom green)

Summary of Scores

R: 29 + 1                      EB: 3:1.5

W	10(2W)	F+	13+1	A	13	W%	35
P	15	F-	3	Ad	4+1	D%	52
Dr	1+1	F+	1	H	2	Dr%	3
d	2	M	3(1-)	Hd	2	d%	7
S	1	FM	6(1+)	AObj	1	S%	3
		CF	1	At	3		
		Fm·Fc	1	Paint	1	F%	59-97
		FC	1	Cg	1	F+%	78-82
				Sym	1		
				Pl	1	A%	59
						H%	14
						P	7+1
						P%	24

CASE II

The patient is a 25-year-old, single, Caucasian Navy dental officer admitted to the Psychiatry Service following air- evacuation from Vietnam and referral from the Medical Service with various psychophysiologic symptoms. The patient had been in Vietnam for 10 months of the normal 12 months tour when he was superficially wounded in the chest and right thigh in a mortar attack at a construction battalion camp at Da Nang. The patient was awakened from a sound sleep and knocked out of bed by a crashing mortar shell. The concussion of the second shell knocked the patient down, but he managed to scramble to a nearby fox hole in which he survived the attack. He proceeded to assist at the battle station with serious casualties and was then himself evacuated to a safe area for treatment of his own minor shrapnel wounds. When he returned to duty the next day, he noted that if he had remained in his tent during the attack he would have been killed since he found a huge hole through his bed and his quarters were ruined. The patient slept uncomfortably that night, but it was not until 11 days later during another but far distant mortar attack that he began feeling severe chest pains similar to a myocardial infarction. The pain was sharp and lasted 90 seconds. The following day he began experiencing hyperventilation symptoms along with nightmares, irritability, and a desire to avoid all sharp noises. He was then evacuated to the USAF Hospital at Clark. After evaluation, he was returned to the United States for further

disposition with a diagnosis of traumatic neurosis. His Rorschach protocol is as follows:

Reaction Time: 2" Total Time: 25"

Card I

1. (W F+ A Obj) I see a beetle in a vice. That's about all. (Urge) That's all I see. ((Vice is closing in on it. Suggests beetle? I see the pinchers, head and body. Suggests vice? Nothing really except that it's the first thing that came to mind.))

Reaction Time: 5" Total Time: 105"

Card II

1. (W F-·CF A Blood) I see a squashed mosquito, it's bitten somebody and blood has squirted out of it. ((Has symmetry of insect and two dark areas would roughly be the wings and I see the head and a tail. Blood? The red spots.))
2. (D FC+ A) > Can I look at it this way? I see a dog that's mirrored in a reflection of a pond. ((Dog? Looks like a scot terrier, it's small and dark, looks like the dog on Scotch whisky. Reflected? Mirror image.))
3. (D CF Exp) √ If I turn it this way I can see an explosion with a fireball and two dark clouds out the side. ((Just the red. ? Just looks like everything going out, an explosion. ? The color suggests fire.))

Reaction Time: 8" Total Time: 75"

Card III

1. (W M·FC'+H P) I see two Negro women working over a pot. They look like native Africans, don't have any clothes on. ((Natives? Color. Women? Breasts. Look like they are cooking something.))
2. (WS F-·FC+ A) √ This way it looks like a bug has eaten a butterfly and it's inside it. The butterfly is red and the bug has two big eyes and two pinchers. That's all.

Reaction Time: 20" Total Time: 60"

Card IV

1. (W M+ (H)) √∧ I see a giant. Looks like he's lost his balance and falling over backward.

Something behind him looks like he's going to fall against but I don't know what it is. That's it. Lose balance? I don't know, he wasn't pushed, just lost his balance. Giant? Great height, just looks very big and monstrous to me.

Reaction Time: 35" Total Time: 105"

Card V

1. (d FC'+ Wound O+) >^ My first inclination would say it looks like a butterfly but really doesn't impress me too much as a butterfly. I can see a wound right in the middle, looks like a fine cut with black and blue coming out on either side of it. ((See a gash right there. How made? With a sharp instrument like a knife. Black or blue? Looks more like black. Come from? Comes from the wound. Where see? See it as an isolated thing. Animal or human? A human. How get? In an accident.)) (bottom extensions of usual butterfly)

Reaction Time: 5" Total Time: 45"

Card VI

1. (W F+ Obj) I see a violin or some kind of stringed instrument. These are the tuning keys, this is the handle of the violin or whatever it is and this is the main part. ((It's missing something. ? Three of four strings and the two holes normally on either side of the violin. The fact that it comes out here doesn't detract from the fact that I think it's a violin. Maybe a mandolin.))

Reaction Time: 20" Total Time: 40"

Card VII

1. (D M+ Hd P) V^ I see one-half of two girls or or else it's one girl looking in a mirror and there is movement up and down. Right now it is down motion. This part doesn't mean anything to me, the bottom. ((See it moving down. ? See the hair trailing behind, downward motion made hair stand up. Actually see it move? Almost. One-half of two girls or reflection of one? Whichever it is--think it's one person looking on a mirror, but only one-half of a person, only top half. Bottom? Don't think it was ever there. ? Born that way or taken away but person doesn't miss it, not amputated or anything like that. Girl? Long hair and shape of chest.))

Reaction Time: 30" Total Time: 65"

Card VIII

1. (W FM+ CF A Fire P)  $\vee \wedge >$  I see an animal, four-legged animal, looks like a leopard, cat-like creature that's stepping off a rock. Looks like it's trying to step backwards to the rock. There's a mirror image as if it were a lake or something and the cat looks like it's going to be worse off than it was. That's all. ((Leopard? General shape of it, rear legs. Mirror image? The fact that it's exactly the same, looks like crystal clear lake or pond. Worse off? Looks like it's heading for something violent or what it's not expecting. Heading for? Orange color suggests fire or flame but animal doesn't seem to be aware of it.))

Reaction Time: 20" Total Time: 95"

Card IX

1. (D M- H)  $\vee$  (green and pink) I see somebody looking for something, feeling for it, probing out but not getting very far. He's laying down on floor, on ground maybe, again it looks like if it reaches too far they'll either be burned or something will happen to make them pull their hands back. ((Guess it's his chest. ? On ground or floor. ? In a dirty, dusty building, sort of a remote place. Reaching for? I don't know, he seems to know but I don't. How does he know? There's purpose in the movement. What is the red portion? Unknown place he's searching in.))
2. (D M+ H)  $\wedge >$  This way looks like a man. He's walking with a stick over his shoulder, a bag tied to it. ((Looks like old haggard man with beard. Going? I don't think he's going anywhere. He's wandering around.)) (green)

Reaction Time: 15" Total Time: 60"

Card X

1. (D  $\rightarrow$  W mF CF Blast)  $\vee$  All I see here is a great deal of motion, very swift and very straight. Looks like something has gone clear through something, blasted it to both sides and didn't even slow it down. ((This is last part of object, nose of it is off card. Be? Something metal and flying very fast like a missile, just completely destroyed what it went through. ? A wall or something

liquid splashed on either side. Liquid? Part of it looks like blood but can't be because it's not a living thing it went through, looks like something stable and immovable but it's very suggestive of something living because all different colors represent parts of the inside. ? Yellow is blood serum, brown-green-orange is bile, red is blood, green could be gall bladder, blue may be brain tissue, but yet I don't think it's anything living.))

#### Summary of Scores

		R: 14		EB: 5:4			
W	8	F+	2	A	5	W%	57
D	5	M	4 (1-)	H	4 (1)	D%	36
a	1	FM, CF	1	Hd	1	d%	7
		FC'	2	Obj	1+1	F%	21-86
		M·FC'	1	Exp	2	F+%	100-75
		F·FC+	1	Wound	1	A%	36
		F·CF	1	Blood	0+1	H%	36
		mF·CF	2	Fire	0+1	P	3
						P%	22

#### DISCUSSION

The symptoms described in the narrative material of these two cases are clearly akin to those described by Kardiner (1) which I am paraphrasing:

1. An altered conception of oneself in relation to the outer world. The patient no longer feels in control of outside events; rather, he feels overwhelmed by them.
2. The repetition of catastrophic dreams.
3. Spastic inelasticity as the patient contracts his ego, in snail-like fashion, to the threat of danger.
4. The creation of conditions for action seen in acoustic hypersensitivity, startle pattern, and general preparedness for flight.
5. Periodic outbursts of disorganized aggression.

6. The development of the "delusion" that the world has become an unbearably hostile place.

From the psychologist's point of view, not only do the symptoms manifested by these two men closely resemble the classical syndrome, but their Rorschach protocols clearly illustrate the test behavior correlates of these clinically seen symptoms.

The preconception might be that the Rorschach protocols obtained from those with traumatic neuroses would follow the generally constricted pattern usually seen in those with the more common anxiety reactions. This pattern as offered by Phillips and Smith (2) and Shafer (3) involves: few responses, few wholes, many usual details, many animals, constricted M:C relationship, long reaction times, many card rejections, low F+ percent, and a plethora of vague, poorly conceived responses such as clouds, x-rays, smoke, and maps. But, as the reading of these two protocols indicate, the commonly assumed "repressive style" (4) associated with anxiety neuroses is almost totally missing here. In almost diametrically opposed contradistinction, these two men produced protocols which exhibit sharp, clearly defined, highly imaginative, decidedly unsteretyped responses involving the use of both color and human movement to a more than expected extent.

What they do show, most significantly, is an almost abreactive repetition of the trauma with the inkblots serving merely as stimuli or "releasers" in this process. As Kardiner describes it, this is how Freud portrayed the posttraumatic behavior of the patient, that is, attempting to free himself of anxiety by abreacting the anxiety piecemeal by constant repetition. Quite evidently, neither of these two patients has completed the process, because despite the fact that each of them had been tested two to six weeks subsequent to the trauma, they were clearly exhibiting in their Rorschachs, many of the reactions they must have experienced immediately following the event.

As an illustration of the preceding principle, we can review representative responses from the two protocols as they relate to each of the symptoms of traumatic neurosis:

1. The patient feels overwhelmed by outside events; he develops the delusion that the world has become a hostile place:

Case I

- A. (III-5) A monster with big eyes and hands . . . It's mad, mean, angry about something, like it's after somebody.
- B. (VII-Add) Bear head . . . Angry look on him.

Case II

- A. (I-1) I see a beetle in a vice . . . The vice is closing in.
- B. (III-2) A bug has eaten a butterfly and it's inside it.
- C. (V-1) A butterfly. I can see a wound right in the middle . . . A gash right there.
- D. (VIII-1) A four-legged animal . . . Looks like it's trying to step backwards to the rock . . . It's going to be worse off than it was . . . Looks like it's heading for something violent or what it's not expecting . . . Fire or flame.
- E. (IX-1) I see somebody looking for something . . . It looks like if it reaches too far they'll either be burned or something will happen to make them pull their hands back.

2. The creation of conditions for action and general preparedness for flight; hypersensitivity and startle pattern:

Case I

- A. (I-2) Beetle . . . Ready to take off.
  - B. (III-3) Like cat that's been scared, like you come up behind it, it'll look at you and jump.
  - C. (V-3) Dog leg . . . Like on the run or something.
3. Periodic outbursts of disorganized aggression:

Case I

- A. (IX-1) Looks like somebody don't know how to paint, kind of splattered around on this one. Like something I used to do when mad.

- B. (IX-4) This looks like a guy . . . Looks like he's throwing something, picked it up and just heaved it . . . Mean looking face.

Case II

- A. (II-1) I see a squashed mosquito, it's bitten somebody and blood has squirted out.
- B. (II-3) An explosion with a fireball and two dark clouds . . . Just looks like everything going out.

4. The repetition of catastrophic dreams: (This is the most striking of all the symptoms that these two patients translated into Rorschach terms. They have almost recreated the trauma and appear to be reliving it during the taking of the test.)

Case I

- A. (VIII-1) Rib cage . . . [Would see] over in Vietnam, friend of mine, seen his chest blown out.
- B. (VIII-3) Could look like a guy who's got his head all blown up . . . Saw this on a gook, a VC. Split open, fragmentation went through. Lip over front part but blown back over. Also see white tissue and bone. When asked how he felt looking at it, his response was, "Don't even like to look at the blot." Here, the loss of distance was startling and for that moment it appears as if the patient was reexperiencing a horrifying event.

Case II

- A. (X-1) All I see here is a great deal of motion, very swift and very straight. Looks like something has gone clear through something, blasted it to both sides and didn't even slow it down . . . [It's] something metal and flying very fast like a missile, just completely destroyed what it went through . . . Liquid splashed on either side . . . Part of it looks like blood but can't be because it's not a living thing it went through, looks like something stable and immovable but it's very suggestive of something living because all different colors represent parts of the inside. Yellow is blood serum, brown-green-orange is bile, red is blood, green could be gall bladder, blue may be brain tissue.

Obviously, many of the responses can be attributed to more than just the one category they were placed in. Also, there were many responses which would not be placed conveniently in the four categories named but which are a distinctive and meaningful part of the records, such as, the somatic concerns expressed in the anatomy responses, the inner tension symbolically depicted in the animal skin stretched "real tight," the feelings of instability seen in the percept of the giant who has "lost his balance and [is] falling over backwards," the anxiety over body integrity illustrated in the violin that is "missing something" and the "half of a person" who was "born that way . . . not amputated or anything," and finally, the more emotionally-laden, morbidly-colored responses that reflect not only concern over bodily integrity but real apprehension such as the dried up leaf that "was green and then it dies" and the "skeleton of a bird, rotted away for awhile . . . eaten away by ants."

#### CONCLUSIONS

In order to maintain what reputation I have in the psychologic community, I would not wish to make any far-reaching pronouncements on the nature of traumatic neuroses or even traumatic neuroses as reflected in Rorschach protocols based only on these two cases. The formulation of theories based on an N of two I leave to my colleagues engaged in the practice of psychoanalysis. Thus, the reporting of these two cases is somewhat of a harking back to the early days of Rorschach testing when the reporting of protocols was, in and of itself, considered important.

It was felt that these protocols were worth reporting since it appears that traumatic war neurosis, at least in the way I have defined it, is rare and that projective material gleaned from such cases is even rarer. Furthermore, these two protocols are clearly explicit and distinctive records beautifully illustrating how the Rorschach may act as a "releaser" of highly charged fantasies and affects in an acute, situationally-induced illness. These cases also show that traumatic neuroses produce a different kind of anxiety than is usually associated with the general anxiety neuroses. We do not see the extensive blocking, constriction, banality, vagueness, and lack of integrative ability associated with the records of pan-anxiety cases. Instead we see a loss of distance, a great deal of projection, the expression of intense feelings, an almost perseverative expression both directly and symbolically of concerns related to the trauma,

and an almost total exclusion of previous, more time-spanning, characterological concerns. It seems, in these two protocols, that the trauma has temporarily paralyzed other psychic functioning leading to the complex of symptoms Kardiner explicates and which these two protocols manifestly articulate.

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THE RORSCHACH REPRESSIVE INDEX AS A  
MEASURE OF PSYCHOLOGIC FUNCTIONING

Charles L. Jennings

Repression is a mechanism utilized to maintain an adaptable level of contact with the environment. It serves to prevent uncomfortable and threatening thoughts from coming into awareness. The concept was basic in Freud's differentiation of the conscious and unconscious.

Repression operates through the cognitive process-- without thought and without language there would be no need for repression. Recent studies have emphasized the role of repression in verbal behavior. Rogers (5), for example, views repression as a form of denial in that a conscious representation of the phenomenon would be inconsistent with the self. Eriksen and Kuethe (3) view repression as a form of avoidant verbal behavior. They are of the opinion the punishment of expressed thoughts leads to an elimination of these thoughts from consciousness. Dollard and Miller (2) consider repression as an automatic avoidance of verbal behavior particularly when the avoidance is reinforced by a reduction in anxiety. Repression, in their theoretical framework, may be construed as an avoidance of those thoughts that would act as cues for anxiety. Other research emphasizes the role of speech as a feedback system. Here the emphasis is on speech as a self-monitoring system which further implies that behavior is dependent upon thought.

Levine and Spivack (4) are of the opinion that repeated acts of repression may result in a limited ideational process; a history of repression could result in a poor availability of language. They hypothesize that the early language experiences together with the neurologic makeup of the individual may predispose him to utilize repression when faced by anxiety-provoking situations. Repression, in this instance, would be self-limiting and inhibiting of the individual's interaction with and adaptability to his environment. Repression is not the only source of limited language or adaptability, but they make the assumption that the properties of thought, and if a certain indistinctness is revealed in language, it will also be revealed in thought.

Levine and Spivack have developed a measure of the individual differences in a subject's proneness to repression. This is not a measure of repression per se, but rather of those ideational properties that may predispose the individual to repression (4). They have called this the Index of Repressive Style (RIRS).

This index is based on an evaluation of the language of the subject's response to the Rorschach. The responses to the Rorschach constitute a "reasonably extensive sample of the subject's verbal behavior" and are the end result of a process involving perception, associative flow of ideas, images, memories, and verbal communication. Repressive style may be inferred from the response process in terms of how specific and elaborated, or vague and diffuse they are.

Their working hypothesis stated that the more highly developed the language function, the more personalized, delimited, and precise the individual's percepts and concepts would be. To the extent that this is achieved, Levine and Spivack are of the opinion that language, and therefore thought, will not be repressed.

The purpose of this present study is to determine whether the RIRS could serve as an estimate of psychologic functioning of a group of bright, highly motivated, achievement-oriented individuals. It was hypothesized that this group would be highly verbal with the ability to express personalized percepts easily, and that evidence of repressive function would be low.

#### METHOD

The subjects were 15 male pilots randomly selected from a pool of 80 subjects. Each subject in the process of their evaluation had been administered the Wechsler Adult Intelligence Scale (WAIS), the Minnesota Multiphasic Personality Inventory (MMPI), and the Rorschach.

Each instrument was scored in the conventional method. In addition, the MMPI was scored for the Byrne repression-sensitization scale (RS) (1) and the Welsh anxiety scale (AR) (6) each of which are self-report measures of the extent to which an individual utilizes repressive measures.

Each Rorschach was scored according to the seven categories developed by Levine and Spivack (4). These are:

1. Specificity: the quality of nouns in a response--the greater the specificity, the less repressive functioning.
2. Elaboration: the greater the elaboration in terms of adjectives, adverbs, and phrases utilized, the greater the personalized expression in the response and the less the repression.
3. Impulse responses: any reference to sexuality, hostility, anality, or dependency reflects lessened repressive functioning.
4. Primary process thinking: condensations, displacements, physiognomic impressions, and magical notions guided mainly by affects and drives.
5. Self-references: statements that reflect the existence of personalized feelings and memories in consciousness--usually reflect direct expressions of affect or a recollection of something that is associated with the response.
6. Movement: the more movement, the less repressive functioning.
7. Organization: the ease with which associational connections are made and the subject shapes and organizes responses, the less the repression.

A score of 0 to 2 is assigned to the Specificity category depending on the level of specific content; Elaborations are scored 1 if the adjectives and adverbs reflect size, emotional state, physical state, beauty, etc; and 2 if they imply deterioration or impulse states. Impulse states, primary process thinking, and abstract responses are scored 2; self-reference and movement responses are scored 1. Details which are separate from the main response content, but related to the main response are scored 1 under Specificity or Elaboration. The scores for each category are summed, and the mean is obtained. The mean scorable responses constitutes the RIRS for that particular subject. A standard deviation may be calculated for each subject (4).

The higher the RIRS, the lower the repressive barrier being measured. Separate scores for each of the seven categories are not calculated and presently play no part in the interpretation according to the authors. Clinically, however, they could be areas that suggest where a subject is placing emphasis.

### PROCEDURE

To determine the influence of intelligence on the tendency to repress, a correlation was obtained between the RIRS and WAIS Full Scale IQ score ( $\rho$ ). Correlations were also obtained between the RIRS and Welsh anxiety (AR) score, the Byrne repression-sensitization (RS) score, and the MMPI K scale. The AR, RS, and K scores reflect the extent to which an individual admits to symptoms of anxiety, tends toward the internalization of feeling, or is defensive. It has been hypothesized these measures of repressive functions tend to show some significant relationship to the RIRS.

### RESULTS

The mean RIRS was 2.56 with a SD of 1.10. The median score was 2.21 with an interquartile range from 1.82 to 3.16. The range of scores was from 1.66 through 6.10.

TABLE I

Individual RIRS mean scores and variability

Case	RIRS	SD
1	1.71	.67
2	2.61	1.88
3	6.10	2.47
4	2.83	1.34
5	3.25	1.48
6	2.38	2.81
7	1.94	1.31
8	2.10	2.45
9	2.00	.76
10	2.29	1.21
11	2.57	1.44
12	1.71	1.15
13	2.13	1.39
14	1.66	1.03
15	3.05	1.53
	$\bar{X}_M=2.56$	$\bar{X}_{SD}=1.41$
	SD=1.10	SD= .47
	Median=2.21	
	Range=1.66-6.10	

The mean WAIS Full Scale IQ was 132.7, SD 6.4. The correlation ( $\rho$ ) between the RIRS and the WAIS Full Scale IQ was .01 ( $p=NS$ ). Verbal skills are important in both of these measures, but this correlation indicates that broad intellectual factors per se, are not a major component of the RIRS. The correlations ( $\rho$ ) between the RIRS and the three MMPI measures were also not significant. This has been a consistent finding in the research reported by Levine and Spivack (4).

TABLE II

Means, standard deviations, correlations, and level of significances of each measure with RIRS

RIRS	Measure	$\rho$	p
$\bar{X}=2.56$ $SD=1.10$	<u>WAIS FS IQ</u> $\bar{X} = 132.7$ $SD = 6.4$	.01	ns
	<u>Byrne's RS</u> $\bar{X} = 36.0$ $SD = 8.5$	-.38	ns
	<u>Welsh AR</u> $\bar{X} = 17.9$ $SD = 4.2$	.06	ns
	<u>MMPI K</u> $\bar{X} = 20.9$ $SD = 3.2$	-.19	ns

#### DISCUSSION

Comparing these data with other normative studies using the RIRS, it is noted that our results are similar to those determined for young executives and male college students. The only directly comparable group was an Army group, however, their mean score and range was considerably less than our group. This would suggest that, in general, the group

of Army personnel utilizes a more repressive style than our group since higher RIRS scores represent less repression.

In general, the results of this present study support previous RIRS research in its lack of significant relationship to other indices of repressive style. The RIRS is a measure of an individual's verbal output from which his style or functioning in a wide variety of situations may be inferred. If language is limited (low RIRS), this may indicate that the individual tends to be constricted in his everyday activities, may tend to exercise less impulse control, and thus be more responsive to situations that call for reflexive action.

The high RIRS subject theoretically is reported to view life in terms of its personal meanings and may engage in a ready flow of ideation. He is not likely to express himself overtly in an impulsive fashion. His actions will tend to have a deliberate, planned approach. He may respond well to sensory isolation (space flight?) because he is less dependent upon outer stimulation. In contrast, the low RIRS individual tends to be more practical, responds deliberately to the situation, is a realist, and is issue-oriented. Each of these short descriptions contain attributes considered essential to the psychologic functioning of aerospace personnel.

We are in the process of evaluating the use of the RIRS as a measure that may be useful in differentiating candidates for special projects that require an individual who is practical, issue (action) oriented, and who has the ability to respond in a reflexive manner, but yet one who also has a certain facility to be tolerant of his anxiety, to let his mind roam freely and creatively, and to engage in means-ends pursuits with the ability to delay gratification.

From the results obtained to date, we view the RIRS as a measure worthy of consideration in the ranking of candidates. Further research is in progress to determine if there are significant differences in functioning between those who score in the upper quartile and those in the lowest quartile.

#### SUMMARY

This is a preliminary report concerned with the utility of the RIRS (Rorschach Index of Repressive Style) as a method that would contribute to the selection and ranking of

candidates for various special projects. It emphasizes not only the individual's level of verbal facility but also his freedom of expression. This research did not support a significant relationship with measured intelligence or with the self-report scales of repression. Our results are similar to those obtained for the norm groups of young executives and young Army personnel. Further research is in progress to determine if there are significant differences between high RIRS and low RIRS subjects and areas of psychologic functioning.

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## DIFFERENTIAL USE OF SOCIAL WORK PERSONNEL

Robert L. Barker

There is a modern tale about a military study to find ways of making better use of manpower in the Armed Forces. One phase of the study was to examine current personnel requirements for artillery units. The investigators found that six men were stationed at each field cannon even though there seemed to be jobs for only five. They were told that six men were assigned because the manual called for that many people. The investigators couldn't understand the discrepancy so they consulted the author of the manual, an aged retired Army general. "What is the sixth man supposed to do?" The old man replied to the investigators, "Why he holds the horses."

The story is fictitious, but it illustrates one of the most distressing problems confronting 20th Century man. In a technologic age in which each year sees new and more efficient means of providing for human well being, there is an almost overwhelming demand for people who have the know-how to man these new operations. There is a technologic bottleneck, but it is due to shortages of qualified people rather than machinery, and because of it any misuse of limited human resources is scandalous. When manpower is deployed to the achievement of goals which no longer have relevance, as is the case in the field cannon example, the achievement of man's more valid aims are vitiated.

The professions are particularly confronted with manpower scarcities and all are engaged in ambitious efforts to do something about it. Recruiting campaigns, enlargement of professional schools, automating certain means of rendering professional services, and employing "subprofessional" technicians to offer assistance are four of the major efforts of this type. Depending on the particular profession, there has been great variation in the relative degree of success which each type of effort has achieved. Most of the professions have recognized that they are never going to be able to find all the people they could use to enter their professional ranks and have thus looked to the use of auxiliary personnel as the best alternative. These aides free the professional from the performance of very important functions

but ones which do not require the extensive amount of formal training which the professional possesses. Their use frees the professional from such duties so he can confine his activities to those which do require his unique training. In such a way limited manpower resources are not squandered.

Social work has had more difficulty than most professions in the use of nonprofessional, auxiliary personnel. There are two reasons why this is so. First, there has existed a chronic lack of concensus by professional social workers as to whether nonprofessional aides should be used. Second, there is lack of agreement about the use to which these aides should be put even when there is agreement that they should be used. While these issues have been dealt with elsewhere (8), they both deserve some elaboration here. As to whether social work should employ nonprofessionals, there is a good deal of conflict. The question should actually be a moot one because 75 percent of all workers employed in social service occupations in the United States do not have M.S.W. degrees (5). But among those who do, the prevailing sentiment has long been that social agencies should seek to become staffed 100 percent by MSW workers. Many of the more wealthy states and numerous public and private social agencies advocate and attempt to employ MSW workers exclusively. There is a feeling among social agency administrators that to employ anyone less than the fully trained professional is a reflection that the agency has poor standards, is not itself professional, and that the service it renders is somewhat less than adequate. Yet full MSW staffing in any social work agency is no more of an indicator of the agency's adequacy than would be the case if hospitals were to suddenly fire everyone who was not a physician or if the military forces were to employ only generals and admirals. Every organization needs many different kinds of people with different levels of training and different positions in the heirarchy. The job of the big organization cannot be done alone. As Abraham Lincoln once said, "I could as easily bail out the Potomac River with a teaspoon as attend to all the details of the Army" (10).

Thus, it seems probable that there will someday be substantial concensus in social work that the use of the non-MSW is here to stay and that it can be a positive asset. The inevitability is because there is virtually no chance of ever obtaining as many professional social workers as are and will be needed. This can be easily verified. A government study recently found that within two years there will be 100,000 unfilled positions for MSWs in the United

States (15). The 70 schools of social work in the nation are now graduating less than 4,000 MSWs annually while running at virtual capacity. While some new schools are developing and existing schools are slightly expanding, it is nothing like that which would be required to meet projected demands. Even if four times as many graduate schools were to somehow quadruple their existing capacities, they would be able to fill only half of the vacancies that exist. And the projected MSW shortage is underestimated at best because the overt demand for social workers is concealed by the fact that many social work administrators do not admit to vacancies because they feel they have no chance of obtaining them. The point is that unless social work foresakes the role of providing social services, it will ultimately have to recognize that utilizing people who are not MSWs is essential.

The second issue, that of how to utilize the non-MSW in social work settings, is vastly more complicated. The trouble is that social service provision itself is a rather abstract and wide-reaching activity, much more so than that of other professions. The physician, for example, can compartmentalize the patient's tangible physical needs into fairly distinct entities and assign these entities to various helping personnel such as nurses, x-ray technicians, physical therapists, and orderlies. The dentist has developed distinct auxiliary occupations such as the dental hygienist and dental technician to carry out such vital functions as cleaning instruments, cleaning teeth, and so forth. This frees the dentist to accomplish the more complex tasks, and he is given the mandate to work on the patient's teeth below the gumline. The gumline thus becomes the unit by which to differentiate the activities which are appropriate for the dentist and his auxiliary personnel.

But what is the gumline in social work? What activities in the realm of social service provision should be the exclusive province of the MSW and what can be adequately performed by non-MSW assistants? The fact that this question has not been satisfactorily answered has probably been the reason for so much antipathy by professional social workers toward the use of the non-MSW in social service. For if there is no distinction between what must be done by the professional from what can be done by the technician, then for the protection of the client all services should be met by the professional. But the manpower crisis makes it imperative to find a way to make the distinction so that the nonprofessional may be systematically employed and so that the professionals are not uncomfortable with it.

But that way is not easily found. More than 200 studies in social work, addressing themselves to the question of whether to and how to utilize the nonprofessional in social work, have been completed in the past 10 years (2, 7). The major result of nearly every one of them, although this is not generally recognized in the profession, is that they have opened up many Pandora's Boxes of unanticipated problems and complications. At the heart of these studies has been the suggestion that there is need to more clearly delineate what it is that the social worker actually does and then to segmentalize these activities in such a way as to make differential assignments to professionals and nonprofessionals on the basis of some foreordained criteria. For example, many of these studies have taken the approach that a social work organization should specify all the valid and legitimate tasks which it normally does. These tasks should then be rated as to their degree of complexity by some neutral but expert judges, and those which are deemed most complex should be assigned to the professional for fulfillment, and those which are less so could be done by the nonprofessional (13). The demons which emerge from this Pandora's Box alone are myriad. How can such judgments be made and by whom? How can all the tasks be delineated in advance of their accomplishment? Answering these questions is a challenge, but then comes the hard part. Even if the tasks are delineated and judged as to complexity, it is inevitable that some tasks which are less complicated, and some which are more so, will have to be accomplished almost simultaneously by the same person. This being the case, it appears impossible to give different tasks to different workers no matter how complex or how simple they are.

Another approach, one that the National Association of Social Workers has been experimenting with since 1963, has just as many problems. This attempt to differentiate between the activities which would be reserved for professional workers and nonprofessionals is called the "client vulnerability--worker autonomy criterion" (14). To briefly describe it would be an oversimplification, but it consists of these considerations. Essentially the attempt is to delineate clients and their situations as the unit of differentiation, or guideline, as well as the type of agency that is employing the workers. Client vulnerability was defined as the degree to which the client is subject to possible harm from the intervention of the helping person. The belief is that certain classifiable types of people who come to social work agencies are more likely to be harmed if they are placed in the hands of one who has not been given extensive professional training than

are others. The NASW study was never able to specify just who these kinds of clients would be, but it was hinted that children, and younger people, persons with more serious emotional disorders, and more sophisticated individuals would be more vulnerable. Presumably these individuals would be seen only by professionals, and those with the opposite attributes would safely be seen by the nonprofessional. But also involved is the kind of service which the client seeks. If it is service which does not particularly require great confidentiality and can be subject to outside scrutiny, if it consists of tasks which are very specific and explicitly stated in advance, and if the agency adheres closely to the values of the profession, then the task is deemed appropriate for the non-MSW.

This NASW approach was abandoned after several years of work because of numerous problems. It was found to be untenable because it would restrict work with certain kinds of clients only to nonprofessionals, and this seemed to violate the principles of the profession. Furthermore, people in all their complexities do not lend themselves to such easy classification as to vulnerability. A sophisticated middle aged business executive may be more vulnerable to harm than a seriously disturbed child in certain instances. In short, a new approach has to be taken.

The fundamental inadequacy of the many former approaches has been that they have been built on the premise of finding out how to use professional and nonprofessionals in social work with little regard to the ultimate job they are to do. The studies are more or less simply trying to find ways of carving up the job allocations for the various personnel employed with little regard for whether that job is a valid one or not. Seeking to find optimal use of personnel starting with this approach is like trying to build a machine out of many random parts without having any conception of what that machine is supposed to do. Only with a picture of what the agency goals are and what are the best means of fulfilling them can optimal use of personnel be achieved.

To determine the agency's job requires a systematic analysis of the organization's manifest and latent functions (11). In the analysis, six questions must be answered. These are: (1) What are the explicit, stated goals of the organization?, (2) Which of these goals are most and which are least important for fulfillment when there is a scarcity of resources?, (3) What are the concealed or latent functions of the organization which also must be performed?, (4) Which

of the latent functions are consistent with and which are inconsistent with the stated purposes of the organization?, (5) What are the different possible means by which the manifest functions may be achieved?, and (6) How are the functions differentially allocated in the current structure of the organization? Such questions are answered by addressing them to the people who are involved in, or affected by, the agency including its staff, its chief, its clientele, those related to the clientele, others affected by the agency, and the public at large. In other words, what do each of these status sectors believe are the manifest and latent goals of the organization, and what do they feel are the priorities? When these questions are answered, the notion of what to do with the various personnel to achieve the various jobs to be done becomes immensely easier.

It is rather difficult to see how answering these questions surmount all of the problems raised in the differential utilization of personnel as long as such questions are in the abstract. However, when one considers a specific social work organization and looks at the goals therein, it becomes much clearer. With this in mind, the NASW Utilization of Personnel project focused its attention on a particular social work institution and sought answers to the functional analysis questions in that one sphere. The sphere was the social service departments in the nation's state mental hospitals. Data was obtained by collecting information from 208 (75 percent) of the nation's state mental hospital social service chiefs and from over 400 workers in these units. The data involved information about the differential expectations made of the organization by those who are pertinent to it and about how the personnel were actually being used (4). The results of this study are available elsewhere (1) and because they are only illustrative need not be detailed here. However, to complete the illustration, several conclusions about these findings must be cited.

The study found that the social service departments of the nation's state hospitals for the mentally ill are subject to many conflicting and contradictory expectations about the jobs which the personnel are supposed to do. The social work staff and particularly the chiefs, tended to believe that the other hospital staff members, the clientele, and the lay public saw the social work role as being very different from how the workers themselves saw their role. The major roles of social service in state hospitals included such activities as providing concrete services to the client, obtaining information about the clients for the use of the psychiatric

staff, making appropriate referrals to outside resources, and providing concrete social services for the hospitalized patient's family. These activities are what others expected of social work. The social workers themselves, on the other hand, saw their unit's purpose as being quite different, at least insofar as they spent their time. Rather than devoting the major portion of their activity in the tasks which were expected of them such as providing concrete services to patients and obtaining information, most of their work effort went into the more "therapeutic" activities such as providing individual casework and group work for individual patients on the wards. The discrepancy was particularly great among the MSW workers as compared with those without MSW degrees. The professional workers spent most of their time in casework and group work activities while the nonprofessionals were engaged in providing those services which were expected of the social service units to a significantly greater extent. Apart from these differences between MSWs and non-MSWs however, it was found that there were little other differences between how the two groups are deployed. There was no differentiation as to appropriate activities for the two distinct groups but only differences as to the relative amounts of time which each group tended to spend at each of the agency's goals. It was also found that most agency chiefs would prefer to not utilize the non-MSW, and most felt that there was no unique and distinctive contribution which could be made by the non-MSW.

With a much clearer perception of what the social work unit's actual mandate is, the job of allocating personnel to do it becomes less complex than it would have seemed before. After it was learned of the discrepancies between the stated purpose of the mental hospital units and what the personnel in these units were actually doing, it was possible to reorganize the personnel deployment practices more in keeping with those manifest goals. To test this, a particular hospital social service unit, at the Connecticut Valley State Hospital was selected by the NASW research staff. When the goals were made more explicit, it became possible to consider better ways of utilizing the MSW and non-MSW personnel.

A much more optimal use of personnel was used when three orientations were developed by the research staff and put into practice at Connecticut Valley (3). These orientations were called the "typology of client needs," the social work team, and the "episode of service." Each deserves some elaboration.

The conception of the "typology of client needs" was developed because of the discrepancies between what the expectations of the social agency are and what the workers themselves actually tend to do. The study revealed that the workers felt that they were remiss in their duties if they weren't devoting their sole attentions to the needs of the hospitalized patient. The social service unit's method of "counting" work activity typically was based on how many patients were seen. This meant that for the worker to be considered as having done his job adequately, he would have to confine his activities to only a small part of what is actually expected of the social work agency. Thus, the other jobs simply do not adequately get done. Part of the reason for this seemed to rest in the fact that the social worker's conception of whom his client actually was was too circumscribed. If the social worker's client is only the patient in the hospital, there is no room for the many other services which social workers are expected to perform. Webster has two definitions for the term "client." The first defines client as a "person under the protection of another, a dependent or vassal." This is the implicit definition which the workers seemed to give in their conception of whom their clients were, those dependent upon them, i.e., the hospitalized patients.

Webster's second definition offers more possibilities. In this one, client is defined as "one who engages the professional services of another, a patron or customer." This view of client places more responsibility in the hands of the person for whom services are provided. There is room in this conception for those without a great deal of training in case-work intervention methods because the services to be provided do not imply client inadequacy or the need for professional protection. It also makes possible viewing, as the appropriate activity of social work, a wider range of services for many groups other than the single helpless individual. Thus, everyone who would have something to gain by some kind of contact with the social service organization is considered a client. This could include members of the general public who are more vulnerable to a given social problem or be comprised of the general public itself which requires the services of the social worker to prevent social problems. Other staff members and those who are related to the identified patient-client are others who are thus served. Hence, the client typology consists of eight different client groups. First is the patient-client, the person who is rather dependent because of his suffering from some social malady or health dysfunction. Second are the patient's family members

who are not themselves directly in need of services but who require assistance because of their having contributed to the patient's difficulty and/or who suffer somehow because of the patient's problem. Third, the patient's personal associates such as friends, employers, and neighbors who are relevant, but often to a less urgent extent, because of the same reasons as the family. Fourth, the patient community refers to the entire group of identified patients, either in the mental hospital or making up the social agency's clientele, who can be served better through group intervention and milieu therapy. Fifth, the staff community are those other occupational groups who are also serving the same clients but who call upon the social worker to assist in the fulfillment of their jobs. The hospital psychiatrists, for example, would be in this group because of their requests of the social worker to provide them with vital information. Sixth is the service community, those people engaged in social work and other occupations outside the target agency who also help in the provision of services to the patient-client. These clients obtain aid from the social worker by seeking resources, developing channels of communication, and other such activities. Seventh is the vulnerable public which is that segment of society which is identified as having greater exposure to the conditions which result in the onset of the problem. Such people might be members of a particular minority group with which the agency is involved, people of a certain age group or occupational status or whatever. Finally, there is the lay public at large which requires social services in a more general preventative sense. If all these sectors are seen as legitimate clients of the social agency, as they actually are and which the mandate for social work actually requires, then the work of the agency personnel is directed appropriately and not in an overly circumscribed fashion.

The second element in the conceptual framework is the social work team. Rather than trying to develop criteria for separating the work of the various personnel in the social agency, the social work team encourages unity of work toward a common goal. The team approach differs from the usual models in that several members of the staff work together rather than a single helping person being given the sole responsibility for meeting the client need. There is always at least one MSW and usually several non-MSWs on the team. The number depends upon the nature of the agency and the goal to be achieved, but four would be at or near the minimum. The team leader is always an MSW, and it is his job to determine what is the need and the appropriate service to

be provided. Ordinarily the team leader does not perform the means to the goal achievement but assigns it to one or more of his workers. This ensures professional involvement at all levels, but it frees the professional from having to engage in all the routine tasks which can just as well be accomplished by the non-MSW. In those agencies where much of the function is that of individual treatment, such as in a family service agency, psychiatric clinic, or whatever, it is probable that several members of the team would be MSWs. There would still be others on the team who are non-MSWs, but their work would still entail involvement in the more concrete service-providing activities. The team members would be expected to develop their own unique specialties and skills so that each is not a mere duplicate of the other and so that a wider range of expertness is brought into play in the social work service provision.

The third orientation, called the Episode of Service (EOS), is an attempt to develop a unit of differentiation among the agency's personnel. The EOS is any cluster of activities that go together to achieve a social work organization's specific goal. It is identified in terms of the goal and includes the connotation of all the alternative means by which to achieve it. The means which the team leader chooses to achieve the goal should be those that the team members are competent to perform. The EOS is assigned to the social work team, usually by the agency chief, for a specific goal or a long range and indefinite one. It should be possible to record social work activity in terms of the EOSs in which the team is engaged and fulfilling rather than basing it upon the number of patients seen or the number of social histories taken.

The use of these three orientations clearly led to a better use of personnel in the Connecticut Valley Hospital and led to other advantages as well. First, it meant a wider range of social services. Second, it led to a distinct, unique, and accepted role for the non-MSW, yet it did not sacrifice professional involvement in all spheres of the service-rendering program. Third, it brought about a much closer relationship between what others expected the social work organization to do, and this in turn led to greater esteem of the unit. The manpower problem did not seem so overwhelming once it was taken for granted that non-MSWs were here to stay and that they could be used effectively. And finally, their use did not constitute a threat to the MSWs because it provided a distinct and important role for each.

There are now many indications that his model for the use of social work personnel will be adopted by many state mental hospitals and numerous other agencies. If it becomes widespread and proves to be an effective means of getting the most out of the personnel available, much of the manpower crisis can be eased and better social services can be provided.

Social work in the military services is ahead of its civilian counterparts in the utilization of social work personnel of all levels of training. This is reflected in the military social work literature compared with the civilian. The former does not focus on whether to use the non-MSW but on how they can be best deployed (6, 9, 12). Military social work is ahead of its civilian counterpart also because there is a more explicit delineation of the job that is expected of the workers at all levels of training. There is still a great need for further delineation of the appropriate role for social workers in the service and a need for expanding the activities in which he is engaged. The use of the non-MSW in the military service, particularly if well-chosen and well-trained, not only has led to greater freedom for the MSW to fulfill expectations which are more in keeping with his training, but it has led to a better overall range of service. Nonmilitary social work is sure to follow suit.

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A STUDY OF THE USE OF SHORT FORMS OF THE WECHSLER-BELLEVUE  
INTELLIGENCE TEST ON A RESTRICTED POPULATION

Richard E. McKenzie

In order to rapidly screen Air Force personnel for both clinical and research purposes, a reliable, easily administered intelligence test is highly desirable. It is obvious, however, that the intelligence quotient derived by use of a short form test must relate closely to the quotients obtained from the complete, well-standardized test.

One of the accepted, commonly used measures of intelligence is the Wechsler-Bellevue Scale, Forms I and II, and the more recent Wechsler Adult Intelligence Scale (WAIS) (5, 6). Numerous investigations in the use of short forms of the several Wechsler Scales have been carried out. Rabin (4) multiplied the average of the Comprehension, Arithmetic, and Similarities subtests of the Wechsler-Bellevue Form I by 10 in order to arrive at an estimated full scale score. Gurvits (1) multiplied the combined scores of the Digit Span and Picture Arrangement subtest by 5 to estimate a full scale score. Of most interest to us was the work of Kriegman and Hansen (2), who selected the Vocabulary, Information, Block Design, and Similarities subtests for their short form which they called the VIBS. Each of these subtests was selected on the basis of its correlation with the Full Scale I.Q., using Wechsler's own rationale. To convert the sum of these four subtests to a base of ten subtests in order to utilize Wechsler's original tables to determine I.Q., they applied the conversion constant of 2.5. They found that the predicted full scale score thus obtained gave a consistent underestimation of the actual full scale score. By applying the formula:

$$\frac{1}{N} \ll \frac{FSS}{VIBS}$$

they found that 2.7 was a more appropriate conversion constant. This, of course, implies that these four subtests do not contribute 40 percent of the total of ten subtests but 37 percent. This fact appears to be in accord with Wechsler's recommendation that direct proration of less than six subtests is not advisable. However, while Wechsler states that less than six subtests will not yield a valid and reliable

quantitative estimate of intelligence, Kriegman and Hansen found that, for their population, proration of VIBS by 2.7 would yield just such an estimation of mental ability. Therefore, we were interested to determine if we would obtain similar results using VIBS prorated by 2.7 in estimating the intelligence levels of our own Air Force patient population. In addition to this determination, we were interested in finding out if there were differences in the VIBS scores derived from the Wechsler-Bellevue Form I as compared with Form II and the WAIS. This was especially true since an earlier study published by the author on mentally deficient subjects reported high correlations between Full Scale Wechsler II and VIBS I.Q., scores as well as VIBS and Stanford-Binet I.Q.'s (3).

After several months of using Kriegman and Hansen's VIBS and prorating by 2.7, it became apparent that resultant I.Q.'s were considerably elevated compared to the expected range for our population. While it would have been quite simple to adjust the constant, it was decided that an investigation might disclose some unique test effects of a sub-population with a restricted range of scores such as comprises our clinical case load. The derivation of an estimate of predictive reliability in using a short form also seem highly desirable.

#### METHOD AND RESULTS

Our clinical test files yielded a total of 484 Wechsler test scores for our population with distribution and characteristics as indicated in table I. There were too few

TABLE I

WAIS WB-I statistics

Population	Test	N	Mean I.Q.	S.D.	Range
Officers	WAIS	129	119.5	7.8	94-137
Officers	WB-I	178	126.2	7.2	109-144
Airmen	WB-I	177	109.2	12.3	80-142

Wechsler-Bellevue Form II test results to include in our study so we were not able to compare Forms I and II.

At this point it seemed possible that the relationship between full scale score (FSS) and VIBS for the airman and officer groups might not be the same since these groups differ with respect to many factors such as age and educational level. Therefore, a separation of test scores was maintained for this grouping. The fact that the mean I.Q.'s for this dichotomy were significantly different at the .001 level did not necessarily mean that the regressions would be different. Obviously the WAIS and Wechsler-Bellevue I test scores should not be combined.

It was obvious that the Kriegman and Hansen sample with an N of 207, mean I.Q., of 76.7, standard deviation of 15.7, and a range of 36 to 126 was from a different population from ours, at least with respect to mean value.

With this in mind, a regression line of FSS on VIBS ( $FSS = a + b \text{ VIBS}$ ) was computed for each of our three populations by the method of Least Squares. After deriving a prediction equation by this method, we tested the hypothesis that our intercept values were equal to zero. This hypothesis was tested to see if the intercept is zero as Kriegman and Hansen's method assumes. We found that our values were significantly different from zero at the .001 level.

In their estimation procedure (weighted least squares) for the slope of the regression line along with assuming that the regression line goes through the origin, Kriegman and Hansen assume that the standard deviation of full scale scores for given VIBS scores increases with any increase in the VIBS score. However, scatter plots of FSS against VIBS for our population revealed that the variability between full scale scores is rather homogenous over the entire range of VIBS scores. Thus, the unweighted Least Squares Method is the desired estimation procedure. The prediction equations derived for our populations are given in table II.

For the two groups having Wechsler-Bellevue Form I scores, a test of the slopes of the regression lines revealed no significant difference. However, the mean predicted FSS for the officer group was significantly different at the .001 level from the mean predicted FSS of the airman group at VIBS = 48 (the point midway between the groups). Thus, the regression lines for the two groups are parallel but displaced

TABLE II

## Prediction equations

Population	Test	Equation	Predicted S.D. about line of regression
Officers	WB-I	$FSS = 31.768 + 1.859 (VIBS)$	7.366
Enlisted	WB-I	$FSS = 27.886 + 1.855 (VIBS)$	8.144
Officers	WAIS	$FSS = 31.866 + 2.112 (VIBS)$	8.163

with that for the officers being higher than that for the airmen.

A similar comparison of the two officer groups revealed that the slopes were not significantly different ( $P < .2$ ). However, the mean predicted full scale score at VIBS = 53 (the midpoint) for the WB-I was significantly smaller ( $P < .001$ ) than that for the WAIS.

In the practical application of the conversion of VIBS to FSS, one would be most interested in finding where a true full scale score might be reasonably expected to fall for a given VIBS score. An accepted means of describing this expected range of values for a given VIBS score is a tolerance interval which is an interval that will include a certain percent of the population with a given confidence probability. For example, a (.95/.75) tolerance interval includes 75 percent of the population with 95 percent confidence. This band is smallest at the sample mean of VIBS and increases as the VIBS score falls away from the mean. The computed .95/.95 tolerance interval for the full scale score at the VIBS mean of the officer-WAIS group is 141.9, plus or minus 18.0. This would indicate that for a VIBS score of 52.09, one may expect true full scale scores anywhere between 159.9 and 123.9. One has 95 percent confidence that this interval includes the actual full scale score of 95 percent of the population of individuals with a VIBS score of 52.09. For the officer-WB-I group, the predicted full scale score at the VIBS mean of 54.13 is 132.4, plus or minus 15.9. For the airman-WB-I group, it is 108.8, plus or minus 17.6 at the VIBS mean of 43.66.

The tolerance intervals for our three test populations indicate that, at the very best, namely, at the mean VIBS, we can be 95 percent confident that 95 percent of the true FSS are less than 18 units from the predicted FSS. Thus, we are forced to accept the fact that VIBS is not a reliable predictor of full scale Wechsler scores for the population.

At this point, we decided to find out if any sum of a limited number of subtests comprising the Wechsler tests would predict accurate full scale scores. In order to simplify the problem, we decided to work only with the WAIS since this is a more recent and supposedly better test. We arbitrarily placed the following restrictions on the desired short form: (1) that in the interest of brevity, no more than five subtests would be utilized, and (2) that predicted scores would fall within 5 units (plus or minus) of the true

FSS for 95 percent of the population for a given VIBS score. In retrospect, this latter restriction is probably too severe an expectation from five tests when the standard error of measurement reported by Wechsler (6) was 2.60 with the full set of ten subtests. Nevertheless, we assumed that if these restrictions could not be satisfied with some set of five tests, they could not be satisfied with fewer tests. Therefore, the investigation was started by looking at sets of five tests. However, the investigation was not restricted to just the sum of five tests but considered any linear combination. If the restrictions could not be met under these conditions, they could not be attained with the straight sum.

The Wherry-Doolittle method was used to obtain a particular set of five tests. This method proceeds as follows in selecting tests: The first test selected is that having the highest correlation with the criterion, that is, the full scale score. The second test selected is that having the highest correlation with the criterion after adjustment for the first test selected. At each stage that test is selected which has the highest correlation with the criterion after adjusting for the tests already selected. The estimating equation used is the multiple regression equation calculated from the selected tests. This procedure will not necessarily give the optimum selection in the sense of yielding the set which will have the largest multiple correlation with the criterion. However, in the present case a good bit of investigation indicates that it has done quite well.

For instance, a factor analysis indicated a grouping of the tests as follows: 5, 7; 9, 11; 8, 10; 1, 6; and 2, 4 (Similarities, Picture Arrangement; Block Design, Digit Symbol; Picture Completion, Object Assembly; Information, Vocabulary; and Comprehension, Arithmetic). The Wherry-Doolittle Method selected tests 9, 6, 10, 5, and 8 (Block Design, Vocabulary, Object Assembly, Similarities, and Picture Completion) in that order. At the last step one might have expected either 2 or 4 (Comprehension or Arithmetic) to be selected instead of 8 since, to that point, one test had been selected from each of the factor analysis groupings except that containing 2 and 4. Actually 8 is only a slightly better selection than 2, and 2 would be the second choice at that step.

The estimating equation based on the selected tests is:  
$$Y = 30.90 + 1.595x_5 + 2.084x_6 + 1.625x_8 + 1.957x_9 + 1.404x_{10}$$

where:

Y = predicted FSS

- $x_5$  = score for test 5, Digit Span
- $x_6$  = score for test 6, Vocabulary
- $x_8$  = score for test 8, Picture Completion
- $x_9$  = score for test 9, Block Design
- $x_{10}$  = score for test 10, Picture Assembly

Tolerance intervals were computed for this equation. They were computed at the point where the interval is smallest, namely when each  $X$  is equal to its mean for this sample, and at the points where all  $X$ 's are one unit from their respective mean, and when all  $X$ 's are two units from their respective means. As indicated above, a tolerance interval is an interval which will include a certain percent of the population with a given confidence probability. For this work, two types of intervals were selected. One interval (.95/.95) includes 95 percent of the population with a confidence probability of .95; and the other, the (.95/.75) interval, includes 75 percent of the population with a confidence probability of .95. Table III indicates the width of the tolerance limits.

Thus, we see that the estimating equation does not satisfy the arbitrary restriction of an interval width of plus or minus 5 points. We cannot state positively that the selected set is the best set of five subtests without checking all of the possible combinations of five tests of which there are 250. However, it is reasonable to assume that this is very likely an extremely close approximation to the best estimate that one can derive from five tests.

TABLE III

Tolerance limits

Value of $X$	Tolerance interval	
	.95/.95	.95/.75
$\bar{X}$	<u>+11.283</u>	<u>+ 6.623</u>
$\bar{X} \pm 1$	<u>+11.559</u>	<u>+ 6.784</u>
$\bar{X} \pm 2$	<u>+12.265</u>	<u>+ 7.197</u>

If one assumes that Wechsler carefully selected his subtests to measure eleven factors with a minimum of overlap, then it is not surprising that only five subtests will not suffice to do an accurate job in deriving a quick estimate of intelligence. It seems unlikely that any competent user of this test would wish to assume that his particular test population would have such an altered test performance so as to permit an accurate estimate. It also seems unlikely that anyone would accept a test score prediction 20 to 30 points in error.

#### SUMMARY

A sample of 484 complete Wechsler test scores from a population of Air Force personnel was evaluated to determine the predictive value of a quickly administered short form of intelligence test. It was found that the VIBS Short Form was not a reliable predictor of full scale Wechsler scores with this population and, further, that no combination of a limited number of Wechsler subtests would likely meet an acceptable level of predictive accuracy in arriving at a quick estimate of intelligence. In view of these results, it seems doubtful that anyone using a short form of the Wechsler tests is approaching an accurate estimate of his patient's intellectual ability.

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