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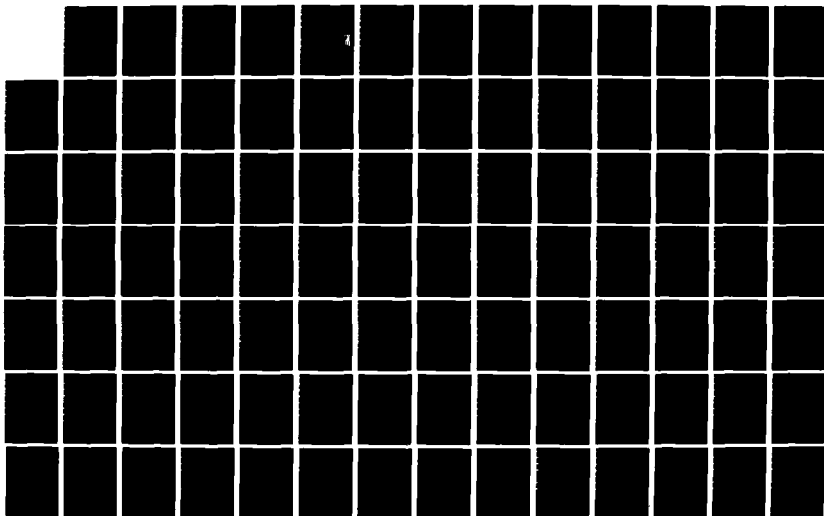
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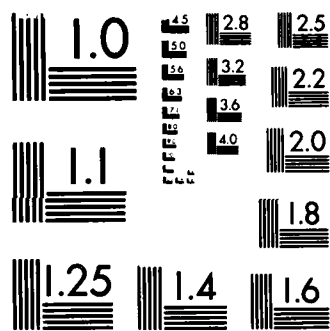
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- ABSTRACT -

The Clinical Prediction of Dangerousness

The failure to accurately predict violent potential in psychiatric patients is currently an area of much popular and professional interest. Psychology literature confirms the inaccuracy of clinical predictions, but contemporary theorists suggest improvements can be achieved by substituting actuarial and environmental information for the traditional psychodynamic and developmental information which most practitioners now employ. Virtually all studies have shown psychological testing to be a poor predictor of violence.

The present investigation utilized typed vignettes which described a brief, fictionalized interview as an analogue to an actual contact with a patient. A recent history of violence (an actuarial factor), support by a caring person (an environmental factor), and psychological testing information were systematically manipulated among the vignettes. Vignettes were mailed to psychiatrists in California who were asked to rate dangerousness and to decide if emergency hospitalization was required for the fictionalized patient. Each psychiatrist received one of 16 possible vignettes. One hundred and sixty responses were included in the statistical analyses.

Statistical analyses were utilized to determine how the three manipulated variables actually influenced professional decision making, and these results were compared with what factors the psychiatrists said influenced them. This study produced many practical implications. Psychiatrists in California incorporate a recent history of violence into the decision-making process, but do not give psychosocial support the attention warranted. Psychological testing exerts a powerful but unwarranted, and possible unconscious, influence on the judgmental process. Psychologists and psychiatrists should be explicitly educated about the limitations as well as the strengths of psychological testing.

Key Source: Monahan J. (1981). Predicting Violent Behavior.
Beverly Hills, CA: Sage Publications.

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By

E. ROGER WILLIAMS

LT COL, USAF, BSC

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by

E. ROGER WILLIAMS, B.S.

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IN

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CHAPTER I

INTRODUCTION

Dangerousness is a topic of considerable concern and controversy in law and mental health. Experts in both fields are often required to estimate the likelihood that a particular person will engage in future dangerous acts. Significant consequences usually follow such an expert opinion. The community-at-large, always vulnerable to these decisions, bears the moral and financial responsibility to support involuntary incarceration of those presumed dangerous and to absorb the violent behavior of persons incorrectly assessed and released. Courts have increasingly asked mental health practitioners to participate in the assessment of dangerousness even though critics have insisted that such predictions are generally inaccurate. The present work attempts to further examine the process of the clinical assessment of dangerousness.

History of the Concept: Dangerousness

Dershowitz (1974, p. 57) reports that "the preventative confinement of dangerous persons who cannot be convicted of past criminality but who are thought to cause serious injury in the future has always been practiced, to some degree, by every society in history." At first glance this may appear a prudent and even simplistic task which could be performed by any rational person. Unfortunately, the predic-

tion of human behavior has proven quite complex and even basic definitions of dangerousness have varied considerably. Mullen (1980) speculates that professionals who must assess dangerousness may not be concerned about a scholarly definition but know perfectly well what is involved, i.e., is the person likely to be violent to himself or others in certain situations. This sort of fundamental reasoning and the underlying assumptions of clear and consistent thinking have unfortunately not prevailed.

A positive assessment of danger potential typically leads to involuntary detainment, a curtailment of constitutionally granted rights. Accordingly, the courts at all levels have been extremely active in determining a legal definition of dangerousness. Current legal definitions, however, sometimes have been at odds with the prevailing operational definitions employed by mental health practitioners. In 1960, for example, in Overholser v. Russell, the court held that competent evidence of an individual's inclination to commit any criminal act was sufficient to indicate dangerousness to the community. This case is often cited as a bizarre extreme in the definition of dangerousness since Russell's "check-writing proclivity" was the basis of his legally determined dangerousness.

In 1969, in Cross v. Harris, the U. S. Court of Appeals further refined the legal definition by stating that the "finding of dangerousness must be based on a high probability of substantial injury." More recently, in New Jersey v. Krol, the Supreme Court of New Jersey

formulated an important decision: "Dangerous conduct is not identical with criminal conduct. Dangerous conduct involves not merely violation of social norms enforced by criminal sanctions, but significant physical or psychological injury to persons or substantial destruction of property" (p. 301). So, by adjudication and legal precedent, the legal definition of the term "dangerous" has become more refined and specific. Nevertheless, dangerousness as a topic has continued to escalate in controversy, both in public and professional circles.

As the legal aspects of dangerousness have become more refined, the mental health practitioner's responsibility has become more specific. In a bitterly contested decision, the California Supreme Court ruled that psychiatrists and psychologists may be liable for civil damages if they fail to inform the prospective victim of a patient they have predicted or should have predicted to be violent (Tarasoff v. Regents of the University of California, 1976). This ruling mandates a police-power role upon psychotherapists with regard to patients they perceive as potentially violent.

The dangerousness controversy appears to be at the core of a more generalized concern about our mental health system. Widely publicized disagreement by expert witnesses in the courts raises public confusion and anger, given general expectations of competence by mental health professionals and of justice through our judicial system. The highly visible trial of John Hinkley is an example of the controversy. In this case, a host of doctors disagreed about the specific diagnosis

and, even more disquieting, could not agree whether or not the defendant was mentally ill (Stone, 1984). These diagnostic issues are fundamental to public confidence in professional practice by psychiatrists and psychologists.

Dangerousness in Mental Health

Shah (1978) listed 15 points in the criminal justice and mental health systems at which a person's dangerousness is considered. Of these, six are specific to psychiatric settings while the others are primarily criminal in nature. The six psychiatric contexts are:

1. Decisions pertaining to the commitment and release of "sexual psychopaths," "sexually dangerous persons," "defective delinquents," and the like.
2. Commitment of drug addicts (because of fears they will commit violent crimes to support their habit).
3. Decisions concerning the emergency and longer term involuntary commitment of mentally ill persons considered to pose a "danger to self or others."
4. Decisions regarding the "conditional" and "unconditional" release of involuntarily confined mental patients.
5. Decisions concerning the hospitalization (on grounds of continued mental disorder and dangerousness) of persons acquitted by reason of insanity.
6. Decisions regarding the transfer to security hospitals of mental patients found to be too difficult or dangerous to be handled in regular civil mental hospitals (Shah, p. 225).

Each of these six areas has associated with it a unique body of knowledge and a particular controversy. Although some professionals, by virtue of their type of practice, may be particularly involved or

uninvolved with one of six psychiatric contexts above, virtually all mental health practitioners must occasionally confront decisions about "emergency commitment." In the emergency situation an unhospitalized patient has displayed some behaviors suggestive of dangerousness and must be evaluated for hospitalization and possible involuntary commitment. Because the practical issues are very real, the moral issues reasonably clear, and the predictive issues potentially surmountable, this present work focuses on the emergency commitment of those mentally ill persons who may pose a danger to themselves or others.

The Process of Assessment

Dangerousness predictions for emergency commitments usually involve an interview conducted by a physician, psychiatrist, psychologist or legal professional. Shah (1975) points out that

there has been a tendency on the part of many physicians and psychiatrists to behave as though there were no particular difficulties in assessing dangerousness. Regrettably, fairly brief, conclusory statements about a patient's mental illness and potential dangerousness--based on equally brief examinations--have often typified involuntary civil commitment proceedings in many jurisdictions (p. 502).

In the "emergency situation" the patient has usually been referred because he or she has behaved dangerously or in ways suggestive of future dangerousness. Apart from extreme examples such as the "check-writing proclivity" noted earlier, most patients are referred because they actually frightened someone by word or deed. Emergency

referrals are usually reasonable, by a common sense standard, in that they are based on actual violations of prevailing social norms.

Assessment procedures and styles are highly varied. Most evaluators trained in the "medical model" would conduct a face-to-face interview with the patient during which they would ask questions thought to tap the potential of dangerousness. This interview would probably include an examination of the patient's current mental functioning (mental status examination), quality of childhood life, the nature of his relationship with his parents, school history (academic and disciplinary), work history, marital history, police record, style of resolving conflicts, alcohol/drug abuse, and an accounting of the events leading to the current referral. Some evaluators would collect other data such as observations by the police or ward staff, psychological testing, and so forth, depending on the training of the evaluator. Once the available data are pooled, the evaluator typically formulates a psychiatric diagnosis and then a statement about dangerousness. The manner in which the evaluator integrates the data and makes conclusions is entirely subjective. There is marked variation both between evaluators and even by the same evaluator during different sessions. For example, given the same interview and historical data, a psychoanalytically oriented evaluator may place great emphasis and decision-making weight on the patient's current feelings about and childhood relationship with his father, while a behaviorally oriented evaluator might base his or her decision

primarily on the police record and recent history of fistfights. Such differences in thinking are highlighted during case conferences when, provided with identical data, a host of professional observers arrive at totally different conclusions about diagnoses, dangerousness and virtually any other question posed. In his treatise, "Why I Do Not Attend Case Conferences," Paul Meehl (1973) expounded in detail and at considerable length about the many varieties of faulty logic which even highly trained persons employ in assessments of which interview data.

Critics of Clinical Assessment

Civil libertarians and those skeptical about psychiatric and psychological practice have argued that the so-called experts in human behavior simply cannot predict dangerousness to any acceptable standard. Ewing (1982, p. 67) reports that "Empirical research has consistently demonstrated that clinical predictions of dangerousness generally prove to be inaccurate." He concludes that mental health practitioners are accurate in no more than one out of three predictions and that the only purpose served by such predictions in capital sentencing proceedings is to insure the award of the death penalty. It is important to note, however, that capital sentencing hearings represent only a small fraction of the contexts within which a person's dangerousness might be formally evaluated. Ewing encourages mental health professionals to take a formal ethical stand against clinical prediction of dangerousness in capital sentencing proceed-

ings. Szasz (1963) has argued persuasively that clinical predictions of future dangerous behavior are unfairly focused on the mentally ill. Persons labeled paranoid, Szasz states, are readily committable, while highly dangerous drunken drivers are not. Indeed, dangerousness such as that displayed in racecar driving and the endeavors of astronauts receives admiration and applause. Other clinicians protest that the requirement to act as evaluator fatally contaminates the therapist's primary role of helper-healer (Monahan, 1981; Ewing, 1982).

In contrast, one finds few strong advocates of such clinical predictions among mental health professionals. Most writers who do support that role seem to consider that mental health has been assigned that responsibility by our society, and acknowledge the need for relevant research and dissemination of current findings to those who must perform the task. Virtually all articles in this vein recognize that predictions of dangerousness are of questionable validity and that the evaluator simply may not be able to properly assess all such situations. (Shah, 1978; Monahan, 1981).

Theoretical Bases of Violence

Biological Formulations

Perhaps the most difficult and yet interesting aspect of the violence/dangerousness problem is the manner in which such behavior is conceptualized. As with any psychological problem, e.g., schizophrenia, much research has been conducted in search of definitive biological causation. Although there have been cycles of speculation

about inherited predisposition toward criminality and violence, there are few "hard findings." One initially promising line of research was on the XYY chromosome (Jacobs, Brunton, & Melville, 1965). The normal male cells have one X and one Y chromosome while the normal female has two X chromosomes. The cells of some men were reported to have one Y chromosome too many. These men with XYY chromosomes were found to be prone to violence and were designated "supermales." XYY males have also been found to be more aggressive and impulsive, tall in stature, usually below average in intelligence, and prone to facial acne in adolescence. Montagu (1968) has cited convicted multiple murderer, Richard Speck, as an example of the XYY chromosomal type. He was tall, mentally dull, had an acne-scarred face and possessed a record of 40 previous arrests. As compelling as this research is, few studies have been clearly positive and many people with a history of violence do not display this genetic abnormality (Hunter, 1968; Welch, Borgaonkar, & Herr, 1967).

Violent behavior has also been linked to sexual characteristics in studies analyzing the effects of testosterone (Persky, Smith, & Basu, 1971; Kreuz & Rose, 1972). Women have also been found to be affected by hormonal levels. Dalton (1964) and Moyer (1971) have demonstrated a disproportionately large number of crimes committed by women just prior to menstruation.

Central nervous system activity has also been widely studied as a correlate to violence. In reviewing electroencephalogram (EEG)

studies of 1500 sociopaths and various control groups, Ellingson (1954) noted that between 31 and 58 percent of the sociopaths showed some form of EEG abnormality. Hare (1970) has raised the possibility that these EEG data reflect dysfunctions in the underlying temporal and limbic systems. These systems, he reports, appear to play a particularly important role in the regulation of fear-motivated behavior.

Childhood and Familial Formulations

A triad of enuresis, pyromania and cruelty to animals (Hellman & Blackman, 1966) is frequently cited as childhood behaviors which are precursors to adult violent behaviors. Justice, Justice, and Kraft (1974) reviewed 1500 references to violence in psychiatric literature, interviewed 750 professionals who dealt with violent persons, and retrospectively analyzed over 1000 clinical cases. They reported four "early signs": fighting, temper tantrums, school problems, and an inability to get along with others. Based upon discussions with large groups of psychiatrists and psychologists, Goldstein (1974) concluded that recognized precursors of violence were childhood history of maternal deprivation, poor father identification, nocturnal enuresis, possibly fire-setting, violence towards animals and brutalization by one or both parents. In a longitudinal study, Lefkowitz, Eron, Walder, and Heusmann (1977) utilized peer ratings, parents' ratings, self-report and a personality test to predict developing aggressiveness. They found that "aggression at age 8 is the best predictor of

aggression at age 19, irrespective of IQ, social class or parents' aggressiveness" (p. 192).

McCord (1979) reported a 30 year follow-up of 201 boys who participated in the Cambridge-Somerville Youth Project between 1939 and 1949. She found that 36 percent of the incidence of later criminality could be accounted for by childhood predictive factors including lack of supervision and exposure to parental conflict and aggression.

In a review of criminological research in the past decade (Geis & Meier, 1976), Wolfgang, Figlio, and Sellin's (1972) work was cited as one of the more influential investigations. Wolfgang et al., obtained research data on all boys born in Philadelphia who were living in that city between their 10th and 18th birthdays. The study identified 9,943 boys and 35 percent of them had at least one documented contact with the police by age 18. The variables of race and socioeconomic status (SES) were most strongly associated with reported delinquency. "Chronic offenders" were defined as those who committed five or more crimes. Six percent of the sample, 627 boys, represented 18 percent of the total offenders and committed over half of all the crimes. Chronic offenders had a greater number of residential moves, lower IQ scores, and fewer grades completed than did the nonchronic offenders, even when race and SES were held constant (p. 248).

Psychological Formulations

Although Freud's theories began with a fundamentally biological and genetic orientation, he was really the first person to develop the individual psychology of aggression to any appreciable extent. He thought that aggression was a deeply rooted biological drive, comparable to that of sexuality (Sarason, 1972). Moral conscience, the superego, often acts to intrapsychically oppose and thwart aggressive impulses. On the other hand the rational aspect of our personality, the ego, works to moderate aggression (and sexuality) and redirect it in a socially acceptable manner. Those persons who do not develop a sufficient moral conscience were thought to be susceptible to later deviant, psychopathic behavior.

Those with such incomplete personality formation display enduring personality traits which may be diagnosed as the psychopathic subgroup of personality disorders. Sociopathic, psychopathic and antisocial disorders are generally accepted as equivalent terms. Cleckley (1964) formulated a set of criteria for this disorder:

1. Average or superior intelligence.
2. Absence of irrationality and of other commonly accepted symptoms of psychosis.
3. No sense of responsibility.
4. Disregard for truth.
5. No sense of shame.
6. Antisocial behavior without apparent regret.
7. Inability to learn from experience.
8. General poverty of affect.
9. Lack of genuine insight.
10. Little response to special consideration or kindness.
11. No history of sincere suicide attempts.
12. Unrestrained and unconventional sex life.
13. Onset of sociopathic symptoms no later than the early twenties.

Some researchers have tried to relate violence to a personality trait. Megargee (1970) described overcontrolled and undercontrolled personality subtypes which correspond to violent crimes. The overcontrolled type, characterized as a person with high inhibitions and strong repressed hostility, has found support in studies with the MMPI. Millon (1974) described the violent personality in terms of an active-independent behavior pattern. Such people mistrust others, are driven by a need to prove their superiority, and display these temperamental attributes in their childhood (p. 257). Feshbach (1970), however, concluded that no single cluster of traits describing those prone to violence has yet been identified.

Miller and Dollard (1941) developed the frustration-aggression hypothesis in which aggression is a logical and expected consequence of frustration, its purpose being to remove or destroy the obstacle to need-gratification. Over time, this hypothesis has undergone considerable revision. Subsequent studies have tended to emphasize the role of social learning theory, especially modeling behavior, in violent behavior. Bandura (1969) has provided an excellent discussion of the various modeling theories. Current theories express the importance of identifying the situational cues and environmental stimuli which encourage violence.

Environmental Formulations

Since the earliest personality theories, the individual has been the primary focus of research into the causation and cure of abnormal

behavior. Clearly, violence is not attributable to a single factor (Singer, 1971; Mark & Erwin, 1970; Toch, 1969). Arthur (1971) has concluded that a .40 correlation coefficient is roughly the maximum limit of cross-situational consistency in personality research. In fact, prominent personality theorists have debated the value of personality constructs (Mischel, 1968).

Given all the available evidence about the prediction of violence, even the most precise predictors are still not impressive. There is an enormous body of research which implies that behavior predicted in one context and observed in another will correlate poorly (Mischel, 1968, 1973; Bem & Allen, 1974). Mischel has noted that "predictive validity tends to decrease as the gap increases between the behavior sample on the prediction measure and the behavior that is being predicted" (1968, p. 323). Keeping in mind the current criticisms about the prediction of violence as well as the increasing emphasis on situational factors, many current specialists are recommending that clinicians attend much more carefully to situational variables in their day-to-day work with patients. Monahan (1981, p. 130) states that "the inclusion of situational variables is the most pressing current need in the field of violence prediction. The principal factor inhibiting the development of situational predictors of violence is the lack of comprehensive ecological theories relating to the occurrence of violent behavior."

Moos (1973) identified six environmental factors as possible codeterminates of behavior:

1. Ecological dimensions, including meteorological, geographic and architectural variables.
2. Dimensions of organizational structure, including staffing ratios and organization size.
3. Personal characteristics of the milieu inhabitants, implying that the character of the environment depends upon the characteristics (e.g., age, sex, abilities) of those who inhabit it.
4. Behavior settings, defined by Barker (1968) as units with both behavioral and environmental components (e.g., a basketball game).
5. Functional or reinforcement properties of environments, suggesting that people vary their behavior from one setting to another principally as a function of the reinforcement consequences in the different environments.
6. Psychosocial characteristics and organizational climate, in which the characteristics of an environment as perceived by its members are measured on various psychosocial scales.

Monahan (1981) discounts ecological dimensions and dimensions of organizational structure for the prediction of violence. He also deems the concept of behavioral settings to be insufficiently developed to allow for meaningful application in the prediction process. Thus, the remaining three factors in Moos' classification appear to have the greatest relevance to the current problem.

Conceptualizing environments in terms of personal characteristics of its inhabitants would entail inquiries about the people with whom the patient lives, works, and socially interacts. The cultural base rates or social norms maintained by other inhabitants may well relate significantly to an individual's propensity for violence.

Emphasizing reinforcement would lead to an analysis of the environmental consequences to violence. If a person receives increased social status because of violent behavior or if violence is the primary way to acquire material goods, then the risk of violent behavior in any individual is higher than in other possible settings.

Finally, environments may be conceptualized in terms of their psychosocial characteristics and organizational climate. Moos has found that the social climate perspective

assumes that environments have unique 'personalities' just like people. Personality tests assess personality traits or needs and provide information about the characteristic ways in which people behave. Social environments can be similarly portrayed with a great deal of accuracy and detail (1975, p. 4).

Moos has devised scales to measure the perceived climate of a variety of settings including prisons, hospital wards, classrooms, military units and families.

These methods of describing environments overlap greatly and none of the described factors is exclusively categorical of different environmental attributes. Furthermore, these situational variables have not been proposed as replacements but as supplements to the various prediction schemes already employed. Monahan (1981) feels that the greatest promise for improved predictive accuracy of violence lies in understanding the interaction between personality and environmental variables.

Monahan (1981) has extended Moos' (1973) classification in ways that render the assessment of situational variables more practical.

He has identified six variables as the major situational correlates of violent behavior:

1. Family environment. One of the best predictors of whether a released psychiatric patient will require rehospitalization is the degree of support provided by their families (Fairweather, Sanders, & Tornatzky, 1974). Further, the family context is crucial since family members are so frequently the victims of violent behavior (Monahan, 1977). Skodol and Karasu (1978) found that in 77 percent of the emergency commitments involving possible violence, the targeted victims were family members. The family environment may be critical because of its role in supporting or discouraging violent behavior, and because of its function as a generator of either stress or support in the patient's life.
2. Peer environment. There are numerous studies documenting the effects of one's friends as behavior models (Bandura, 1969) as well as substantial folk wisdom about the detrimental effects of "getting in with the wrong crowd." If a person is returning to the same peer group in which he or she has committed past violent acts, then future violence may be quite likely.
3. Job environment. Glaser (1964) interviewed at monthly intervals a sample of 135 parolees released from federal institutions in 1959 and 1960. He found that 65 percent of

those who held a satisfactory job during the first three months of parole were eventually successful in completing an eighteen month parole period, compared with a 36 percent success rate among those who did not hold a job during the first three months.

4. Availability of victims. Toch (1969) describes violence in interactional terms. Although some people are fairly indiscriminate in whom they choose as their victims, many others are quite specific. Those who murder their spouse, for instance, have a very low rate of recidivism, presumably since they have eliminated the specific source of their frustration and anger. The Tarasoff case (1976) is another example of victim-specific violence (Roth & Meisel, 1977; Wexler, 1979). A client revealed in his therapy his intention to kill a woman who had rejected his romantic overtures. The client then committed no violent acts for two months while the woman was on vacation, but murdered her shortly after she returned home.
5. Availability of weapons. The availability of weapons has long been thought to be a situational catalyst to violence. Not only may the presence of weapons increase the chances of violence occurring (Berkowitz & LePage, 1967), but the severity and lethality of the violence is intensified (Newton & Zimring, 1970; Zimring, 1977). Just as the

possession of the means to commit suicide is frequently used as a predictor of suicide (Beck, Resnick, & Lettieri, 1974), so the person who has a variety of tools for violence may be more likely to harm someone than is an unarmed person.

6. Availability of alcohol. Alcohol consumption and violence are frequently linked in the literature (Schmidt & Witte, 1978; Wolfgang, 1958). Regular involvement with a drinking/social group may constitute a significant risk for impending violence, as least for those whose past violence has occurred during periods of alcohol consumption.

Clinical Predictions

Because psychologists and psychiatrists have been involved in the process of personality assessment for many years it would be reasonable to assume that there ought to be fairly recognized standard procedures for particular situations. For example, there ought to be standardized procedures for the evaluation of leadership abilities, executive potential, psychopathy, suicidality and so forth. Unfortunately, this is not the case. There tend to be substantial differences among practitioners as to what interview strategies to employ, which psychometric instruments to use, and what to do with the responses once they are obtained. In general, the selection of assessment strategies seems to be governed more by "tradition and superstition than by relevance or evidence" (Lanyon & Goodstein, 1982, p. 171). Recognizing this problem, Meehl (1956, pp. 264-265) wrote

that assessment devices ought to be chosen "on the basis of their empirically demonstrated efficiency, rather than upon which one is more exciting, more 'dynamic', more like what psychiatrists do, or more harmonious with the clinical psychologists' self-concept."

Clinical predictions are a highly specialized area in the domain of human judgment. When the collecting, scoring or recording of input data involves human judgment, then judgmental measurement is employed. When a decision is made following human integration and interpretation of the data, then human judgment is employed. The open-ended interview is representative of judgmental data collection techniques. At the end of the interview the clinician may rate the patient or client on a variety of personality dimensions such as anxiety, suicidality and motivation for change. Although such ratings may be quantified, they are not mechanical because human judgment is required to obtain them. As with any measuring device, the clinician is subject to evaluation in terms of reliability and validity. Because of the complex nature of the human stimuli on which such judgments are made, it has been difficult to gather objective, nonjudgmental data against which to validate the judgments. Consequently, many investigations of the reliability and accuracy of judgmental measurement have been conducted under highly contrived or artificial circumstances (Lanyon & Goodstein, 1982). Despite these and other experimental shortcomings, such evaluations provide the only scientific evidence available on the efficacy of the human judge.

An early review of the literature by Taft (1955) acknowledged the methodological and conceptual difficulties inherent in the studies, but Taft felt he could still draw some conclusions about the characteristics of good judges of other people. He concluded that the ability to judge others was positively correlated with age, intelligence, esthetic interests (particularly dramatic and artistic), self-insight, emotional adjustment and social skills.

Shortly after the publication of Taft's review, a series of papers by Cronbach (1955, 1958; Gage & Cronbach, 1955) challenged his conclusions. Through a series of studies Cronbach drew attention to the fact that several unequal factors enter into the study of global judgmental accuracy as measured by Taft and others. Specifically, Cronbach found four components which have varying degrees of relevance to the concept of judgmental accuracy. These components follow an analysis of covariance and are called elevation, differential elevation, stereotype accuracy and differential accuracy. A judge may have any degree of consistency in each of these four areas, thus affecting his overall judgmental accuracy in a manner made predictable by analytic techniques. Subsequent research has supported this finding (Gordon, 1957; Crow, 1957; Hatch, 1962).

Generality of Judgmental Accuracy

When speaking about the accuracy of a judge, we are making an implicit assumption about the generality of accuracy as a trait of the judge. One would expect that a person who is an accurate judge in one

situation would be an accurate judge across a variety of situations and people. Despite intensive research in this area, early studies produced questionable findings, presumably because of the methodological problems described earlier. More recent studies (Cline & Richards, 1960, 1961) have provided modest but consistent evidence for the generality of judgmental accuracy. Note that the previously described multi-component structure of human judgment does not preclude judgmental generality. It does, however, illustrate the complexities of concept and methodology which plague the field of judgmental accuracy research.

The Clinician as Expert Judge

Despite the merely modest findings that accuracy is a general trait, it seems reasonable to assume that professional decision makers, such as clinical psychologists, are generally more accurate in their judgments than those without specific psychological training. Presumably our society entrusts the responsibility of making important decisions to those most capable of making them. This presumed superiority of the clinician as an expert judge is based on special qualifications resulting from training, experience and the utilization of input data. Surprisingly, there is little empirical evidence to support this contention (Wiggins, 1973).

One early study (Hanks, 1936) found no relationship between training in psychology and ability to use biographical data to predict a subject's response to an inventory. Kelly and Fiske (1951) compared

the judgmental accuracy of advanced students in clinical psychology with beginning graduate students. The students were required to predict the inventory responses of psychiatric patients to whom they had already administered a variety of psychological tests. The results showed no differences between the beginning and advanced clinical psychology students.

Given the academic nature of most psychology courses it may not be surprising that no relationship has been established between educational background in psychology and judgmental accuracy. Professional experience, on the other hand, seems a more relevant variable. First of all, those who hold Ph.D.'s in clinical psychology represent a highly select group, one of the criteria for their selection typically being judgmental skills. Secondly, the daily diagnostic and therapeutic activities seem a much more valuable training experience than simply taking formal psychology courses. Finally, there is no reason to assume that clinical judgments made by undergraduates, or even graduate students, resemble decisions made by trained, practicing clinicians. It should follow that when experienced clinicians are asked to make diagnostic decisions of the kind usually employed in clinical practice, and on the basis of information typically available to them, their superior accuracy over other groups of judges would become apparent. Goldberg's (1959) study followed just that format. He selected a judgment procedure that was a familiar part of most clinicians' daily diagnostic practice, the diagnosis

of organic brain damage from the Bender-Gestalt test. This test (Bender, 1938) required the patient to reproduce a series of nine geometric forms, one at a time, on a single sheet of paper. Because this test is highly dependent on visual-motor coordination it was widely believed to reflect brain functioning. Protocols of 30 patients were selected from Veterans' Administration files, half of which were diagnosed as "organic" on the basis of neurological examinations, while the other half were produced by psychiatric patients with no neurological signs of brain damage. Three groups of judges were selected to represent significant points on the continuum of clinical experience: (a) four psychology staff members with Ph.D.'s and four to nine years of clinical experience with the test; (b) ten psychology trainees with M. A. degrees and one to four years experience with the test; and (c) eight hospital secretaries with no training in psychology and no experience with the test. All subjects were asked to diagnose each protocol as organic or nonorganic and to indicate their degree of confidence with their opinion. There were no statistical differences in accuracy of the three groups, although the trainees and secretaries did produce slightly better results and were more confident of their judgments than the psychologists. Both earlier and subsequent studies (Estes, 1938, Luft, 1950; Kelly and Fiske, 1951; Soskin, 1954; Hiler & Nesvig, 1965; Goldberg, 1965; Levy & Ulman, 1967; Stricker, 1967) tend to support Goldberg's (1959) findings. Even in those studies in which experienced clinicians were

shown to have greater judgmental accuracy than unexperienced laymen, brief training has raised the accuracy of the lay judges to that of the experienced clinician (Oskamp, 1962; Goldberg, 1968).

In addition to his or her training and experience, the clinical psychologist is thought to qualify as an expert judge on the basis of the ability to collect and integrate large amounts of psychometric data. Kostlan (1954) selected 20 clinical psychologists who were asked to make clinical predictions with a variety of input data. Input information included a social history, Rorschach, MMPI, and a sentence completion test. The 20 psychologists were divided into five groups and each was given a different combination of data which they could utilize in their clinical judgment process. It was found that the judges could make better than chance predictions on the basis of routine information (age, marital status, occupation, education, and source of referral), and only two of the other four experimental conditions produced increased accuracy of prediction. These two conditions were social history, MMPI, and sentence completion as one experimental variation of input data, and social history, MMPI, and Rorschach as the other. It was concluded that additional tests do not necessarily produce increased clinical accuracy. In this case, the addition of some tests led to increased accuracy while the addition of others did not.

Sines (1959) used clinical psychology graduate students as judges who reviewed experimentally varied amounts of input data from which

they formed descriptions of patients. Sines concluded that clinicians formed descriptions very quickly, and the descriptions changed very little once the initial description was formed on the basis of the biographical data sheet. The interview, in comparison with the MMPI and Rorschach, was the only input which consistently resulted in increased accuracy. In fact, there was evidence that, beyond a certain point, accuracy began to decrease as more data were available.

Wildman and Wildman (1975) asked six clinical psychologists to review test data taken from ten nurses and ten psychiatric patients, and to determine which tests came from which group. The Bender-Gestalt, House-Tree-Person, MMPI, TAT and Rorschach were employed. In general, judgments made on the basis of two different tests were less accurate than those made from the MMPI alone which was the most accurate individual test.

Other studies investigating clinical judgment and psychometrics have produced similar results (Golden, 1964; Little & Shneidman, 1959; Scott & Johnson, 1972). These studies consistently demonstrate that personality tests are not as effective as history data in psychological prediction or description. Furthermore, a single test, and it doesn't seem to matter which it is, adds about as much accuracy to clinical prediction as do a number of tests (Lanyon & Goodstein, 1982).

There has been an indication in recent literature (Matarazzo, 1983) of significant improvement in at least one specific area of

clinical judgment. The third edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1980) reflects a diagnostic method based on massive interdisciplinary research and structured interviewing. Spitzer, Forman and Nee (1979) report reliability coefficients from .66 to .77 for the 15 major categories which comprise Axis I diagnoses, the "clinical syndromes." Some of the reliability coefficients reported actually reached the previously unattained value of 1.00. The construction of DSM III is a model worthy of emulation in other areas of clinical judgment.

Research Predicting Dangerousness

The preceding paragraphs attested to the difficulty of conducting sound research in the area of human judgment and also indicated some of the surprisingly bleak findings about the accuracy of human judgment. The clinical prediction of dangerousness is a small but significant area of the human judgment literature. There have been a few well done studies in this area during the past decade.

Kozol, Boucher, & Garofalo (1972) conducted a ten year study involving 592 male offenders, most of whom had been convicted of violent sex crimes. Each offender was examined by at least two psychiatrists, two psychologists, and a social worker. Psychological testing and an extensive life history derived from independent sources were also included in the predictive data base. Of the 592 patients admitted to their facility for diagnosis, 435 were released through legal-medical procedures. Of the 435 who were released, Kozol et al.,

assessed 386 as nondangerous and opposed the release of 49 as dangerous. During the five year follow-up period, eight percent of those predicted by Kozol et al., not to be dangerous committed a serious assaultive act, while 34.7 percent of those predicted to be dangerous committed such an act. While this elaborate predictive procedure may appear to have validity, the problem of false positives stands out. Sixty-five percent of the people identified as dangerous did not commit a dangerous act. Despite the extensive testing, interviewing and social history, the predictive team was wrong in two out of three cases of discovered violence (Monahan, 1973).

The Patuxent Institution in Maryland collected data (State of Maryland, 1978) similar to that collected at Kozol et al.'s, Massachusetts Center. Over a period of ten years 421 patients were considered for release, each of whom had been hospitalized for at least three years. The psychiatric staff opposed the release of 286 of these patients on the grounds that they were still dangerous, but the court nevertheless released them. The staff concurred with the court on the release of 135 patients who were psychiatrically assessed as safe. The criterion measure was any new offense, violent or nonviolent, appearing on the FBI reports of the ex-patients during three years following their release. After three years of observation and treatment, between 54 and 61 percent of the patients predicted by the staff to be dangerous were found to be safe. Only seven percent of those released with the staff's recommendation and maintained in

outpatient therapy committed a criterion offense. As with Kozol et al.'s, (1972) study, there does appear to be some validity in the clinical predictions (seven percent recidivism, compared with 39-46 percent recidivism). Still, the majority of those patients predicted dangerous were not found to be engaged in criminal activity over a three year period.

Cocozza and Steadman (1976) followed 257 felony defendants who were indicted but found incompetent to stand trial in New York State in 1971 and 1972. Each defendant was examined for dangerousness by two psychiatrists, with 60 percent predicted to be dangerous and 40 percent not dangerous. During their initial incompetency hospitalization, the dangerous group was only slightly more assaultive than the non-dangerous group (42 percent compared with 36 percent). Following their release from the hospital 49 percent of the dangerous group and 54 percent of the non-dangerous group were rearrested. Only 14 percent of the dangerous group and 16 percent of the non-dangerous group were rearrested for violent crimes.

In examining these three studies, critics (Monahan, 1981) concluded that the "best" clinical research in existence indicates that

psychiatrists and psychologists are accurate in no more than one out of three predictions of violent behavior over a several-year period among institutionalized populations that had both committed violence in the past (and thus had high base rates for it) and who were diagnosed as mentally ill (p. 77).

Others, such as Gordon (1977) have a different perspective. He feels that critics of such prediction assume that the prediction of dangerous behavior is the issue, when in reality it is the probability of dangerous behavior which is estimated. "In the former case the prediction might seem poor, whereas in the latter case, it might be superb" (p. 251). His point is that mental health professionals predict that a person has the propensity to act violently, not that violence will occur. Whether the individual actually becomes violent often depends on chance factors that trigger the violent potential.

Monahan (1981) feels that the most glaring deficiency in current violence prediction studies relates to the criterion measures, which are usually arrest records. He reports that violent behavior is severely under-reported. Thus, many subjects who were predicted to be violent may well have been accurately assessed, but simply not discovered. He supports this thesis with data from The National Victimization Panel (Department of Justice, 1978) and concludes that "of every three violent crimes that occur in the United States, two are reported to the police, and, of these, one results in an arrest" (p. 81).

Improving Clinical Predictions: The Actuarial Approach

There has been much discourse during the past 25 years between proponents of the "clinical" method and proponents of the "actuarial" method of prediction of human behavior. Meehl (1954) differentiates the two approaches as follows:

The mechanical combining of information for classification purposes and the resultant probability figure which is an empirically determined relative frequency, are the characteristics that define the actuarial or statistical type of prediction. Alternatively, we may proceed on what seems to be a very different path. On the basis of interview impressions, other data from the history, and possibly psychometric information of the same type as in the first sort of prediction, we formulate, as in psychiatric case conference, some psychological hypotheses regarding the structure and dynamics of this particular individual. . . This type of procedure has loosely been called the clinical or case study method of prediction (p. 3-4).

Clinical and actuarial prediction differ along at least two dimensions, the data employed and the methods used to derive a prediction from the data. Combinations of these two dimensions lead to four basic categories of prediction:

1. Actuarial data combined actuarially or statistically.
Insurance companies use age and sex as data to derive life expectancy tables.
2. Actuarial data combined clinically. Psychologists review psychometric scores and form an opinion or prediction about future behavior.
3. Clinical data combined actuarially. If a person has a certain diagnosis, his probability of violence is increased.
4. Clinical data combined clinically. A wide variety of interview data are used to formulate a psychodynamic description of a person, and future predictions of behavior are based on that psychodynamic formulations.

In most clinical practices it is probable that the professional utilizes all four types of prediction processes. DSM III (American

Psychiatric Association, 1980) is an attempt to move the diagnostic process towards a more actuarial approach. This is a significant step inasmuch as virtually all studies comparing clinicians and actuarial tables have shown the tables to be more accurate (Meehl, 1954; Sawyer, 1966; Monahan, 1981).

Earlier, biological, childhood/familial, psychological, and environmental perspectives on violence were reviewed. It was evident that a coherent clinical theory to account for violence does not exist, even though different aspects of the various theories have some empirical validity. The next sections of this review examine statistical or actuarial aspects of violence.

Past Crime

The most consistently documented relationship in this area is that the probability of future crime increases with each prior criminal act. Wolfgang (1978) found that for a person arrested four times, the probability of further arrests is 80 percent. The PROMIS Research Project (1977) in Washington, D.C. found that the probability of rearrest for a person with five or more arrests "began to approach certainty" in an analysis of over 45,000 criminal defendants (Shah, 1978).

This aspect of criminality and violence can be viewed from another perspective. The amount of crime attributable to repeat offenders appears to be a substantial portion of all crimes committed. In Wolfgang's (1978) study, 53 percent of all crimes committed by the

birth cohorts which he followed involved only six percent of the sample, those with five or more arrests.

In a Rand study (Petersilia, Greenwood, & Lavin, 1977), 49 habitual offenders reported committing over 10,000 crimes. Over a 20 year period they averaged 20 serious crimes per year and two of those crimes were typically violent ones. The crimes of repeat offenders appear to be a substantial portion of all crimes committed.

Age

By a common sense analysis, some groups are much less prone to criminal behavior than others. For example, infants and senior citizens are clearly less prone to serious or violent crimes than other age groups. Between those extremes, it is increasingly indicated that violent and criminal behavior is strongly skewed toward the young and is becoming more so. In 1975, males between 15 and 20 years represented 8.5 percent of the American population but accounted for 35 percent of the arrests for violent crime (Zimring, 1978). In the Rand study (Petersilia et al., 1977), the average age at which the habitual offenders committed their first serious offense was 14. The State of Michigan (1978) parole guidelines distinguish between high and very high risk for assaultive recidivism solely on whether the potential parolee was arrested for any crime before his 15th birthday. The violent recidivism rate for those Michigan parolees with an arrest prior to age 15 was 40 percent, almost double the 21 percent recidivism for those without such an arrest. Boland and Wilson (1978)

conclude that "the best evidence now available suggests rather strongly that juveniles, especially chronic juvenile offenders, commit a far larger portion of serious crimes than arrest reports had previously led us to believe [and] that the rate at which they commit these crimes declines as they get older. . ."

Sex

About 9 out of every 10 persons arrested for violent crime in the United States in 1977 were male (Webster, 1978). This ratio has remained consistent since such statistics have been recorded (Monahan, 1981).

Race

Silberman (1978) has written:

In the end there is no escaping the question of race and crime. To say this is to risk, almost to guarantee, giving offense; it is impossible to talk honestly about the role of race in American life without offending and angering both whites and blacks--and Hispanic browns and native American reds as well. The truth is too terrible on all sides; and we are all too accustomed to the soothing euphemisms and inflammatory rhetoric with which the subject is cloaked (pp. 117-118).

Blacks accounted for a little less than 12 percent of the American population in 1977 but accounted for 46 percent of all arrests for violent crime (Monahan, 1981). When weighting offenses for seriousness, the differences become even more pronounced. Wolfgang (1978) reported that 7-10 year old non-whites have a weighted crime rate 11 times that of whites and at no age is the racial difference less than a factor of four. Silberman (1978) reported that Puerto Rican New

Yorkers as a group are poorer and less educated than black New Yorkers but have one-third the arrest rate of blacks for violent crimes. He also notes that Mexican Americans in southern Texas have about one-eighth the robbery conviction rate of black Texans.

Socioeconomic Status/Employment Stability

Pritchard (1977) states in his review that eight out of nine relevant studies found an offender's pre-prison income level to relate to performance on parole. Cook (1975) found that 89 percent of parolees who had a satisfactory job after a year on parole ultimately completed parole successfully. Only 50 percent of those without satisfactory jobs were successful parolees. Glaser (1964) also found that parolees who obtained satisfactory jobs were about twice as successful in completing parole as those who did not find satisfactory jobs.

Drug and Alcohol Abuse

Forty-three percent of the Rand (Petersilia et al., 1977) sample were classified as addicted to or users of narcotics. Sixty percent of the sample said they committed their crimes under the influence of drugs, alcohol, or both. Those involved with both alcohol and drugs committed more than twice the number of crimes against persons than did those involved with neither. In a study of several thousand persons released from North Carolina prisons, Schmidt and Witte (1978)

concluded that the person at highest risk of returning to prison was a "young, black, male alcoholic with many previous convictions."

Psychological Testing

Psychometric prediction of individual aggressiveness, assaultiveness and dangerousness has been an active area of research for over thirty years. Especially during the early era of this research, projective tests such as the Hand Test and the Rorschach were evaluated as predictive instruments. Towbin (1959) was unable to differentiate between 48 assaultive and 48 nonassaultive patients by analyzing hostile or aggressive Rorschach content. Using the Hand Test, Brodsky and Brodsky (1967) found statistically significant differences in the scores produced by military prisoners who committed crimes against people and property, those who were disciplinary offenders and those who became model prisoners. Despite statistical significance, the authors noted considerable overlap in the distribution of scores and concluded that the results were of ". . . questionable value in predicting individual anti-social behavior in confinement" (p. 39). Although initial success was reported with the Hand Test in differentiating aggressive from nonaggressive hospitalized schizophrenic patients, Drummond (1966) failed to reproduce such differences in his replication.

More recent research has focused on paper and pencil "objective" tests, primarily the Minnesota Multiphasic Personality Inventory (MMPI).

Davis and Sines (1971) found interesting psychometric and social-historical features in their study of antisocial behavior, but concluded that ". . . if one's primary aim is to discriminate all assaultive men from non-assaultive men, this particular MMPI pattern described will be of limited value" (p. 232). Rader (1977) tried to distinguish between expositors, rapists and assaulters using MMPI data. Other than to note that rapists' scores were higher than the other two groups, reflecting greater emotional disturbance, there was no discriminatory ability.

Megargee (1970) and Monahan (1981) each thoroughly reviewed the violence prediction literature, including most of the studies mentioned above. Megargee (1970) concluded that no tests have been developed which will postdict, let alone predict, violent behavior. Monahan (1981) reports that there is no evidence in the literature of the subsequent decade to modify Megargee's conclusion.

Summary

Despite evidence that mental health professionals cannot accurately predict violence, the task has been legally and functionally assigned to psychologists and psychiatrists. There is evidence, however, that practicing clinicians could enhance their predictive skills by reviewing relevant literature and by employing updated techniques. The two most significant areas of potential improvement are the need to consider environmental as well as personality attributes, and the utilization of actuarial techniques as well as traditional clinical ones. The use of psychological testing for the prediction of violence simply lacks empirical support.

The Present Study

Very little is known about the methods currently used by most clinicians in predicting violent behavior, even though there are numerous studies on the correlates and determinants of violent behavior. The present study attempted to examine the parameters of judgment employed by practicing psychiatrists as they responded to clinical vignettes. The vignettes portrayed emergency referral situations in which family support, history of violence, and psychological testing data were systematically varied. Emergency situations were portrayed because they are probably the most common scenario in which involuntary hospitalization is an issue, and because such situations have few, if any, moral counterarguments. The subjects were asked to make a decision about emergency hospitalization and give an opinion on the level of dangerousness implied.

The experimental hypotheses investigated in this study were:

1. A recent history of violence will significantly influence the subjects' decision-making processes.
2. Psychosocial support will significantly influence the subjects' decision-making processes.
3. Psychological testing data will significantly influence the subjects' decision-making processes.
4. Increased levels of professional experience will alter the subjects' decision-making patterns.

Hypotheses 1 and 2 were derived from the review of literature in clinical predictions. A recent history of violence and psychosocial support represented respectively an actuarial and an environmental factor, both recommended by current theorists as essential when assessing dangerousness. Despite a lack of support in the literature, psychological testing was expected to be used in the prediction process because of the psychometrics' venerable position in training institutions and in the traditions of mental health.

Hypotheses 1, 2, and 3 were the primary investigative targets of this study because they represent vital considerations in daily clinical practice, and because the findings of this study may be in conflict with currently recommended procedures. Hypothesis 4 was generated by more exploratory questions about how various types of professional experiences influence the judgmental process.

CHAPTER II

METHODOLOGY

Subjects

Licensed psychiatrists practicing in the state of California served as subjects for this study. California was selected as the locus for this study because the state has well developed and long-standing commitment laws and has a large body of practicing psychiatrists. Four hundred psychiatrists were initially selected from the Membership Directory of the American Psychiatric Association (1982) with a randomizing procedure. The figure of 400 subjects was determined on the assumption that a return rate of 40 percent or more would guarantee a significant number of subjects per experimental condition to allow valid statistical analysis. If the 40 percent return rate were not reached in each cell, then further sampling would occur based on the actual return rate.

Stimulus Materials

Subjects in this study received a one page cover letter (See Appendix A). This letter, printed on Texas Tech Psychology Department stationery, explained the general purpose of the study and requested participation. Each subject also received a case vignette (See Appendices B and C), a brief questionnaire (See Appendix D), and a stamped return envelope.

Case Vignettes

Two case vignettes (A and B) were designed to present a realistic picture of a mentally disturbed person who manifested some degree of dangerousness. The individual was depicted as confused, impulsive and dangerous by implication, rather than by overt behavior. It was hoped that the vignettes represented a borderline commitment scenario in which the three independent variables might significantly influence the decision-making process.

The two vignettes were differentiated along several dimensions, such as the specific type of behavior displayed, but the essential features as described in the above paragraph were maintained.

The three variables in question, family support, recent history of violence, and psychological testing data, were systematically varied among subjects at two levels each. Psychosocial support was represented in the vignettes by indicating either extended or limited support of the patient by his wife or close friend. Recent history of violence was indicated by the presence or absence of a recent violent episode. Psychological testing was represented in the form of two brief MMPI interpretations derived from MMPI "cookbooks" (Greene, 1980; Lachar, 1974). Both levels of the MMPI were essentially two-point (Paranoia-6, Hypomania-9) configurations. The more pathological interpretation was derived with this configuration elevated to an unspecified level over 70 T-score, while the less pathological configuration was slightly sub-70 T-score. The study was designed to

assess the role played by these three variables in the decision-making process.

Following each vignette, the subjects were asked to rate the degree of dangerousness represented by this patient on a five point Likert scale and to decide whether he or she would hospitalize the patient due to dangerousness (yes or no). These two judgments by the subjects were the major foci of the study.

In addition to those judgments about the fictional patient, the subjects were also asked to estimate the degree of provocation likely to elicit violence from the patient, to describe the vignette feature which best reflected the patient's dangerousness, and to guess the form of violence which the patient was most likely to display. These three areas represented exploratory probes for post-hoc correlational analyses.

Pilot data were collected from nine psychiatrists who reviewed two vignettes each. Those who participated in this initial exposure felt the vignettes to be fairly realistic emergency scenarios and also felt that the degree of dangerousness exhibited was neither markedly high nor low.

Questionnaire

Each participant was asked to fill out a brief questionnaire (See Appendix D). The questionnaire was designed primarily to assess the subjects' degree of experience, involvement, comfort and familiarity with the process of emergency commitment (See Appendix D). These

questions allowed exploration of aspects of the decision-making process in a post-hoc fashion (i.e., Were those clinicians most frequently in an emergency referral situation also those most likely to commit?). Question 1 addressed level of professional experience. Question 2 asked about recent experience with emergency commitment. Questions 3 and 4 addressed the levels of difficulty and comfort associated with the commitment task. Question 5 asked the subject to estimate the amount of his/her patient workload so that any relationship between patient population (inpatient versus outpatient) and readiness to hospitalize could be discovered. An open ended question soliciting comments was included at the end of the questionnaire.

Procedure

This study was conducted via a mailout procedure similar to that proposed by Dillman, Christenson, Carpenter and Brooks (1974). In this present study, 400 psychiatrists were initially asked to participate and were divided among two basic vignettes, each with eight conditions. A reminder was sent out after three weeks (See Appendix E). Three weeks later additional subjects were randomly selected and the entire mailout procedure was repeated for every cell which did not have ten completed responses.

CHAPTER III

RESULTS

Introduction

Vignettes and questionnaires were mailed out progressively in order to complete sixteen cells with ten responses in each cell. There were three initial mailings, each followed by a reminder three weeks later. Every mailing, initial and reminder, generated about a 25% return. The entire mailing procedure, including reminders, produced a 43.4% response rate, although only 39.4% were complete enough to be usable. In order to maintain a balanced design, responses in excess of ten per cell were randomly discarded.

This chapter is divided into three sections in order to present the statistical analyses in a systematic manner. The first section examined the data specific to the vignette. The second section presents the data derived from the study's questionnaire. The final section of this chapter is reserved for additional analyses which explore questions raised during the course of this investigation.

Data Analysis

Statistical Analyses

A treatment-by-levels design analysis was used to determine the effect of the three manipulated variables on the dangerousness rating. Chi-square statistical tests were used for the analysis of the three manipulated factors on the decision to commit (yes/no). Pearson pro-

duct-moment correlations and point-biserial correlations were employed to assess the relationship of the experiential factors, reflected by the questionnaire responses, and both dangerousness ratings and the decision to hospitalize. These latter analyses were exploratory, and not directionally predicted by a priori hypotheses. Therefore, in order to minimize spurious findings, they were required to reach a $p = .025$ level of significance for interpretation.

Non-quantitative Data

Data which were not readily analyzed by statistical procedures, such as the final item on the questionnaire, were reviewed by two raters who together developed categories felt to best represent the data. One rater then categorized all the data, while the other rater categorized one cell of data from vignette A and one from vignette B. The percentage of agreement between these two raters was reported within the appropriate subsections.

Vignette Data

Two basic vignette frameworks were employed in order to assess the generality of any relationships demonstrated. Additionally, there were eight variations of each vignette (see Appendix B). Equal numbers of subjects ($n=80$) responded to vignette A and to vignette B.

Dangerousness

Each respondent was asked to rate a single vignette for dangerousness on a scale which assigned scores ranging from one for extreme

dangerousness to five for minimal dangerousness. The mean dangerousness and standard deviation for all variations of vignette A were 2.59 and 1.26, and for vignette B were 2.69 and .85, respectively. A two-tailed t -test reflected no significant difference between the two samples at the .05 level of probability, $t(158) = .50$, $p = .651$. Given the lack of significant difference, data from the two vignettes were combined in further statistical analyses of the dangerousness variable. This doubled the cell size from ten to twenty in subsequent procedures involving this variable.

An analysis of variance was performed on the dangerousness data and is summarized in Table 1. This analysis indicated that recent history of violence and psychological testing significantly influenced the rating of dangerousness as simple main effects. The availability of psychosocial support did not significantly affect the respondents' assessment of dangerousness. There were no statistically significant interactions. In addition, an analysis of variance was also performed in which the two vignettes constituted a fourth variable. This analysis produced no additional significant main effects or interactions.

Decision to Hospitalize

Each respondent was also asked to indicate whether he or she would hospitalize the patient (yes or no) due to dangerousness. Using a chi-square analysis, vignettes A and B were compared by the frequency of

Table 1

Analysis of Variance on Ratings of Patient Dangerousness

Source	df	MS	F	P
Psychological Testing	1	5.07	5.26	.025*
Recent Violence	1	12.92	13.39	.0003**
Psychosocial Support	1	.25	.26	.610
Testing X Support	1	.41	.42	.520
Testing X Violence	1	.80	.83	.350
Support X Violence	1	1.50	1.55	.220
Testing X Support X Violence	1	.07	.07	.785
Error	152	.965		

* Statistically significant at $p < .05$

** Statistically significant at $p < .001$

endorsed hospitalization. Overall, respondents hospitalized the patients described in Vignette B more frequently than those in Vignette A. The difference was significant at the .001 level, $\chi^2(1, N = 160) = 11.25$. The statistic phi was .265 and indicated the degree of relationship of the two variables (vignette variations and frequency of hospitalization). The chi-square test indicates whether or not the relationships between variables is statistically significant while phi

indicates how strong the relationship is. Because of the significant difference between vignettes in hospitalization frequencies, all analyses of this variable were done separately for vignette A and vignette B. This provided a cell size of ten.

As with dangerousness, both a recent history of violence and psychological testing significantly affected the subjects' decision to hospitalize the patient but only in vignette B. Both of these probability values were adjusted to reflect a one-tailed test of significance since the effects were in the expected direction. Psychosocial support did not significantly influence the decision to hospitalize in either vignette. Table 2 summarizes these results.

Table 2

Chi Square Analyses of Factors Influencing the Decision to Hospitalize

<u>Psychological Testing</u>	<u>χ^2</u>	<u>phi</u>	<u>Probability</u>
Vignette A	.474	.077	.50
Vignette B	10.775	.367	.0006**
<u>Violence</u>			
Vignette A	.474	.077	.50
Vignette B	3.518	.2097	.03*
<u>Psychosocial Support</u>			
Vignette A	1.311	.128	.25
Vignette B	.233	.054	.65

* Statistically significant at $p < .05$

** Statistically significant at $p < .001$

Provocation

In reviewing the data generated by the provocation dimension, it was apparent that the dangerousness scale and the provocation scale often received identical scores. In fact, 48 of the provocation responses of vignette A and 48 of vignette B were the same as the dangerousness rating. Therefore, 60% of the raters awarded the dangerousness and provocation scales exactly the same numerical value. Table 3 graphically displays the frequency of actual differences in each vignette between the degree of rated dangerousness and provocation.

Table 3

Frequency of Differences between Dangerousness and Provocation

Scale Difference Category	n	%
0	96	60
.5	5	3
1.0	27	17
2.0	28	18
3.0	1	1
4.0	0	0

A Pearson product-moment correlation between these two variables was calculated. The results ($r=.58$, $p < .001$) indicate a strong and statistically significant direct relationship.

To further pursue the meaning of provocation, a Pearson product-moment correlation was computed on the data from the first five questions on the questionnaire and provocation response (see Table 4). The results were not significant utilizing a .025 criterion for post-hoc analysis, but a trend toward positive correlation ($r=.16$, $p < .05$) was demonstrated between provocation and number of commitments. The more frequently a psychiatrist was involved in emergency or involuntary hospitalizations, the more provocation he or she estimated was necessary to elicit violence from the patient.

Table 4

Pearson Product-Moment Correlation Between
Provocation and the Questionnaire Dimensions

Questionnaire Dimension	n	r	Probability
Years of Experience	155	.07	.40
Number of Commitments	155	.16	.05*
Level of Difficulty of Commitments	152	-.03	.76
Level of Comfort with Commitments	154	-.03	.75
Percent Inpatient Work	155	.05	.56

*Statistically significant at $p < .05$.

Vignette Feature

Another vignette question asked which feature of the vignette best reflected the patient's dangerousness. Table 5 displays a summary of this dangerousness.

Table 5

Frequency by Category of Response to Question About Vignette Feature From Which Dangerousness was Inferred

Response Category	Vignette A		Vignette B	
	<u>N</u>	<u>(%)</u>	<u>N</u>	<u>(%)</u>
*Recent Violence/Lack of Violence	24	(30)	45	(57)
*Psychological Testing (MMPI)	5	(6)	3	(4)
*Psychosocial Support/Lack of Support	1	(1)	2	(3)
Increased Alcohol Consumption	26	(33)	-	-
Threats	10	(13)	25	(31)
Obsessive Need to Get Even	20	(25)	-	-
Violent Dreams	17	(21)	-	-
Violent Impulses	-	-	16	(20)
Insomnia	-	-	14	(18)
Volatile and Angry Affect During Interview	11	(14)	-	-
Restlessness During Interview	-	-	8	(10)
Belligerence During Interview	-	-	7	(9)
Secretiveness	-	-	7	(9)
Lack of Insight	4	(5)	-	-
Erratic Behavior	-	-	3	(4)
Other	3	(4)	7	(9)

Note: Response categories which are lined out (-) indicate that no such feature was depicted in that particular vignette.

* Variables that were systematically manipulated.

responses. Two raters independently categorized these responses and agreed on 96% of the judgments. The recent violence variable was most frequently reported as the feature "best" reflecting the potential for future violence. Increased alcohol consumption, threats, a need to "get even," violent dreams, violent impulses, insomnia and volatile or angry affect were also frequently reported. Psychological testing and psychosocial support were seldom mentioned.

Form of Violence

The final vignette question asked the subject to predict the form of violence most likely to be displayed by the patient. Table 6 summarizes the responses in descending order, from the most violent to the least violent. A physical attack using only the hands without a weapon was by far the most predicted response. Otherwise, predictions varied fairly evenly across the spectrum of violent behavior, from homicide to verbal outburst.

To determine how the independent variables affected this response, the predictions generated by the "worst" case vignette (recent violence, high testing, no support) were compared with those generated by the "best" case vignette (no violence, low testing, support available). The results are summarized in Table 7 and, by inspection, appear remarkably similar. It seems that the independent variables did not greatly influence the form or intensity of the predicted violent behavior.

Table 6

Forms of Violence in All Vignettes

Form of Violence Predicted	Vignette A		Vignette B	
	N	(%)	N	(%)
Homicide	12	(15)	10	(13)
Suicide	2	(3)	4	(5)
Attack with a weapon	12	(15)	0	(0)
Attack with hands	45	(56)	42	(53)
Property destruction	5	(6)	7	(9)
Verbal outburst	8	(10)	4	(5)
Can't predict	9	(11)	14	(18)

Table 7

Forms of Violence in Best and Worst Cases

Forms of Violence Predicted	Vignettes	
	A1 & B1 (Worst Case)	A7 & B7 (Best Case)
Homicide	1	0
Suicide	0	1
Attack with a weapon	0	4
Attack with hands	15	8
Property destruction	1	2
Verbal Outbursts	1	1
Can't predict	4	5

Questionnaire Data

Initially, the questionnaire data were analyzed with t-tests to determine if significantly different responses were given to vignette A and vignette B (see Table 8). No significant differences were found.

Table 8

Examination for Different Responses to Questionnaire Items by Those Subjects with Vignette A and Those with Vignette B

Questionnaire Item	Mean Scores		<u>t</u>	<u>Probability</u>
	<u>Vignette</u> A	<u>Vignette</u> B		
Years of Experience	16.41	15.28	1.28	.20
Number of Commitments	4.45	4.51	.07	.94
Level of Difficulty of Commitments	3.52	3.44	.44	.66
Level of Comfort with Commitments	2.94	3.15	1.12	.26
Percent Inpatient Work	19.38	20.78	.33	.74

Data Description

There were 160 responses to the first question which asked how many years the subject had been practicing psychiatry. The responses ranged from 3 to 30 years with a mean experience of 15.8 years.

There were 160 responses to the question which asked how many times during the past twelve months the respondent had been involved

in an emergency (involuntary) commitment. The range was from 0 to 20 with a mean of 4.5 commitments.

The next question asked the respondents to rate the complexity of the commitments on a five-point Likert scale. There were 157 responses ranging between the Likert extremes with a mean complexity of 3.5, where moderate difficulty was 3.0 and extreme difficulty warranted 5.0.

Question number four addressed the level of comfort when involved with an emergency commitment. There were 159 responses which ranged completely across the 5-point Likert scale. The mean was 3.04 which occurs at virtually the exact center of the continuum of comfort. This point is described as "moderate" on the questionnaire.

Question five asked the respondent to estimate his percentage of inpatient work. There were 160 responses with a range from zero to 100%. The mean was 20.0% inpatient workload.

Table 9 summarizes the descriptive questionnaire statistics.

Table 9

Questionnaire Descriptive Data

Content of Question	N	Mean	Standard Deviation	Range
Years of Experience	160	15.8	5.6	3-37
Number of Commitments	160	4.5	5.4	0-20
Difficulty of Commitments	157	3.5	1.1	1-5
Comfort with Commitments	159	3.0	1.2	1-5
Percent Inpatient Workload	160	20.0	26.5	0-100

Subjective Comments

The final question on the questionnaire asked if the vignette and questionnaire reflected the subject's thoughts accurately. It also invited further comments. Most subjects (75%) offered no further comments. The comments made were categorized by two raters with a 92% agreement and are summarized in Table 10.

Table 10

Summary of Open-Ended Questionnaire Comments

	<u>Subtotal</u>		<u>Total</u>	
	<u>N</u>	<u>(%)</u>	<u>N</u>	<u>(%)</u>
Satisfaction with questionnaire/ No comments			120	(75%)
General non-specific comments, Personal viewpoints			16	(10%)
Criticisms:				
Oversimplified vignette	5	(3%)		
Need more history	5	(3%)		
Need intuitive clinical element	2	(1.3%)		
Need projective testing	1	(.6%)		
Subtotal of criticisms			13	(8%)
Affirmation of the legal, moral, and procedural complications of prediction and commitment			9	(6%)
Descriptions of personal limitations in subject area such as semi- retirement, lack of clinical duties, and child/adolescent practice only			7	(4%)
Suggestion: Consider trial of medications			5	(3%)
Assertion that prediction is unreliable			2	(1.3%)

The largest category of comments (10% of the subjects) were highly personalized, "chatty" comments which seemed to be addressed to the experimenter. One person gave what he thought was an extended description of the fictitious patient and how this patient was responding to his current plight. Others commented non-critically on the inherent nature and difficulties of such a study.

Criticisms were the next most frequent comment, representing eight percent of the subjects. The two most common criticisms were that the vignettes were oversimplified and that more history was needed. One subject demanded that the study be terminated if childhood history were not considered.

Additional Analyses

The data from the questionnaires were collected for both descriptive and heuristic purposes. These questions probed areas thought to be related to the area of investigation. The assessment of dangerousness and the decision to hospitalize were surmised to be affected by years of professional experience, types of experience, and other factors. To explore this hypothesis, a variety of correlations were generated. First, Pearson product-moment correlations were developed between the dangerousness ratings and the first five questionnaire items. None of the correlations were statistically significant. Neither years of professional experience ($r = -.034$), number of recent commitments ($r = .032$), level of difficulty of commitments ($r = .048$),

level of comfort with commitments ($r = .018$), nor inpatient workload ($r = -.020$) correlated significantly with dangerousness. Next, point-biserial correlations were developed to elaborate on the relationship between the decision to hospitalize (yes/no) and the first five questionnaire dimensions. Of these, only the number of commitments made in the past year correlated significantly with the decision to hospitalize ($r_{pb} = -.455$, $p < .001$). This negative correlation indicates that psychiatrists with less recent commitment experience hospitalized identical patients more frequently than the other psychiatrists in the sample. Years of professional experience ($r_{pb} = -.073$), level of difficulty of commitments ($r_{pb} = -.120$), level of comfort with commitments ($r_{pb} = .048$), and inpatient workload ($r_{pb} = .023$) were not significantly correlated with the decision to hospitalize.

CHAPTER IV

CONCLUSIONS

This investigation examined the effects of three patient-related variables on 160 psychiatrists' assessment of a patient's potential dangerousness and the subsequent decision to hospitalize. A review of this study's findings will be followed by some recommendations for future research in the area of dangerousness.

Subjects

Two vignettes were utilized in order to maximize generalization of results. Subjects were randomly assigned to the vignettes so that between-vignette differences in subjects would be minimal. Statistical analysis of the questionnaire responses to vignette A and B showed no significant between-group difference. In other words, the psychiatrists who answered vignette A and vignette B were similar in their professional experience, their recent experience with commitments, the difficulty they perceive in commitments, the level of comfort they felt when involved with commitments, and their inpatient workload. This lack of statistically significant results between groups of respondents reflects an effective randomization procedure and allows generalization of the results.

The psychiatrists who participated in this study were an experienced group of men and women with an average of over 15 years of practice. They were involved with commitments 4.5 times per year on

the average and were moderately comfortable when involved in the commitment process. The subjects found involuntary hospitalization and commitment procedures to be slightly more than moderately difficult to perform. On the average, they devoted 20% of their time to inpatient psychiatry.

Recent Violence

A history of violence is often described as one of the most significant single predictors of violence (Monahan, 1981). The more recent the documented violence is, of course, then the more relevant it is to the current assessment (Mischel, 1968). In this study, violent history significantly influenced the subjects' assessment of dangerousness. Patients with a recent history of violence were rated as significantly more dangerous than those without such history. Furthermore, 43% of the psychiatrists identified recent violence or lack of violence as the vignette feature which best reflected the patient's dangerousness. Recent violence was identified far more frequently than any other as that feature best indicating dangerousness. It appears that psychiatrists in California do incorporate this factor fairly consistently when assessing dangerousness. The decision to hospitalize was also significantly influenced by this history, although only on vignette B.

Hypothesis 1 speculated that a recent history of violence would be utilized in the decision-making process and seems clearly supported. The psychiatrists were aware that this feature was important and they consistently incorporated it into their judgmental processes.

Psychological Testing

The evidence is overwhelming (Megargee, 1970; Monahan, 1981) that psychological testing is not useful in predicting violence. California psychiatrists appear to cognitively accept this notion. Only eight out of the 160 subjects identified psychological testing as that vignette feature which best reflected dangerousness. Only one of the subjects asked for more testing, and he specifically asked for projective testing. Nevertheless, psychological testing significantly influenced both the assessment of dangerousness in both vignettes and the decision to hospitalize in vignette B. Patients whose test protocols reflected greater pathology were rated as more dangerous in both vignettes and hospitalized more frequently in vignette B.

This variable of psychological testing introduced somewhat of a paradox into the results of this study. The subjects did not consciously identify psychological testing as a significant factor in their assessment and decision-making process, yet they were influenced by the testing. As Nisbett and Wilson (1977) have reported, individuals may not report their own decision-making processes (i.e., prediction of violence) in an accurate manner. This appears to be no less the case with psychological testing.

It is important to note that the actual degree of difference between the so-called pathological and non-pathological MMPI may actually have been very small. The non-pathological test protocol was conceptualized as a two-point (Paranoia-6, Hypomania-9) slightly

sub-70 T-score configuration while the pathological testing was the same configuration elevated at an unspecified level above a 70 T-score. In behavioral or clinical terms, this could have been a minimal difference. Because of the nature of MMPI interpretation, however, slight differences in scaling may lead to significant differences in the written interpretation. In turn, differences in interpretation led to a different assessment of the two patient groups in this study.

Hypothesis 3 held that psychological testing would be utilized in the decision-making process and also seems clearly supported. This utilization was contrary to current literature and seems to reflect tradition and mystique rather than sound clinical principles.

Psychosocial Support

Moos (1973) and Monahan (1981) have elaborated on the importance of environmental factors in predicting the future behaviors frequently at issue in clinical judgments. Fairweather, Sanders, and Tornatzky (1974) reported that one of the best predictors of whether or not a released psychiatric patient will require rehospitalization is the degree of support provided by their families. Moreover, Monahan (1981) suggested that the greatest promise for improved predictive accuracy of violence per se lies in understanding the interaction between personality and environment variables. Clearly then, the import of such variables for the judgments at issue here were well established in the literature.

Despite these compelling recommendations, California psychiatrists were not significantly influenced by psychosocial support factors in their assessment of dangerousness. The presence or absence of psychosocial support failed to influence either the assessment of dangerousness or the decision to hospitalize in a statistically significant manner. Furthermore, only three of the 160 subjects identified this factor as the feature best reflecting the patient's dangerousness.

Hypothesis 2 predicted that psychosocial support would be significantly utilized in the decision making process and was not confirmed by this investigation. Statistical and subjective analyses suggest this factor to have had essentially no influence in assessing dangerousness and determining the need for emergency hospitalization.

Other Factors Influencing the Decision to Hospitalize

It seems logical to assume that the assessment of dangerousness is based primarily on patient-related features. Correlational analyses supported this idea by showing a lack of significant relationships between the subject experiences elicited by the questionnaire and their dangerousness ratings. On the other hand, the decision to hospitalize is presumed to be a second-order decision. It seems to occur only after the assessment of dangerousness has been made but is subsequently influenced by a number of other factors. For example, a psychiatrist not associated with an inpatient psychiatric ward may work much harder to maintain a decompensating patient as an out-

patient than would a psychiatrist who works part-time on an inpatient unit. In examining the relationship of the questionnaire data to the decision to hospitalize, only the number of commitments emerged as a significant factor. This significant point biserial correlation ($r_{pb} = -.455, p < .001$) is quite strong and indicates that the more commitments with which a psychiatrist is involved, the less prone he or she is to hospitalize a patient with a questionable need for hospitalization. Familiarity seems to encourage less use of the procedure although this is not accompanied by increased comfort. Table 11 shows the frequency distribution of commitments and reveals that 58 psychiatrists or 36.2% of the subjects performed no emergency commitments during the past year. This large subgroup may contrast so markedly from those more actively involved as to be responsible for the strong correlation noted above. Fifty-five percent of those psychiatrists with no commitment experience during the past year recommended hospitalization compared with a 38% hospitalization rate by those who had 10 or more commitments last year. It appears that those who rarely invoke emergency hospitalization are more prone to hospitalize identical patients than are the commitment-experienced psychiatrists. The commitment-experienced subjects may choose to manage their patients through increased medication, more frequent office visits and a variety of means besides emergency hospitalization. It may be that psychiatrists who report frequent commitments are often in contact with potentially volatile patients and are more comfortable in their

clinical management than are the other psychiatrists. This correlation does confirm and even elaborate on Hypothesis 4. Experience does modify the psychiatrist's decision-making pattern but this stems specifically from commitment experiences rather than more general psychiatric experience.

Other Analytic Findings

As shown in Table 6, the forms of violence predictions for the "worst" case vignettes (recent violence, high testing, no support) were similar to the "best" case vignettes (no violence, low testing, support available). Even though these "worst" case patients were consistently rated more dangerous than the "best" case patients, the form of violence expected of the two groups was roughly equivalent. Actually, the "best" case vignettes produced more predictions of attack with a weapon while the "worst" case predicted more attacks with hands. If predictions of increased dangerousness do not lead to expectations of more violent behavior, then what expectations are affected? Perhaps less control was expected of these more dangerous people. Unfortunately, the provocation scale failed to provide additional useful information even though it was designed to examine this very idea. Provocation did correlate with the number of commitments ($r = .16$, $p < .05$), but did not reach the .025 level of significance required of post-hoc analyses. This suggests that those psychiatrists

Table 11

Frequency of Commitments

Number of Commitments Performed During the Past Year	Commitments per Category		Decision to Hospitalize per Category	
	% of all			
	<u>n</u>	<u>commitments</u>	<u>n</u>	<u>%</u>
0	58	36.2	32	55
1	11	6.9	6	55
2	13	8.1	8	62
3	7	4.4	3	43
4	3	1.9	2	67
5	31	19.4	18	58
7	3	1.9	0	0
10	7	4.4	3	43
11	1	0.6	0	0
12	1	0.6	0	0
13	1	0.6	1	100
15	23	14.4	9	39
20	1	0.6	0	0

frequently involved with emergency hospitalization tend to see patients as less likely to explode into violence than other psychiatrists. Perhaps these psychiatrists are more comfortable with their own management skills or perhaps they simply tolerate more patient unrest than do psychiatrists with less commitment experience.

More subjects in vignette B (45) than in vignette A (27) reported a recent history of violence to be the feature which best reflected dangerousness. In vignette A the recent violence was "a violent fistfight" while it was "choking a neighbor's dog" in vignette B. It appears that subjects found the choking incident more indicative of dangerousness than the fistfight, even though the choking was directed toward an animal rather than another person. This may be related to the childhood triad of enuresis, pyromania and cruelty to animals (Hellman & Blackman, 1966) which is thought by some to predict adult violence.

Subjective Findings

Psychiatrists are presumably busy and perhaps harried professionals who insulate themselves from external distractions by having authoritative receptionists, answering services and unlisted phone numbers. The easiest response to this questionnaire would have been to ignore it and yet a respectable 43.4% of those approached still responded. It also would have been easier to simply reply to the demands of the experiment without further comments. Instead, 25% of the subjects chose to write something about the vignette, about

commitments or about themselves. Many of the responses were highly detailed and personal while only a few (8%) were critical. These points suggest a genuine interest by the subjects in the topic of dangerousness. Their willingness to answer the vignette and questionnaire as well as voluntarily expand their participation with optional elaborations is a specific behavioral indication of their interest in the topic. Many of their comments pointed out personal frustrations and anger with bureaucratic commitment procedures while others spoke to the complications of evaluating a person and predicting his future behavior. Virtually all comments endorsed either directly or indirectly the responsibilities and complexities inherent in their chosen profession.

Another subjective finding which bodes poorly for the accurate assessment of dangerousness is displayed in Table 3. Two actuarial factors, recent violence and increased alcohol consumption, were appropriately cited as best reflecting dangerousness by approximately one-third of respondents. However, violent dreams were also mentioned frequently and less appropriately. Dreams are a self-reported, unobservable and, therefore, highly subjective feature which must be interpreted from a symbolic, motivational framework to have practical value. The series of steps involved certainly allows for a wide variety of distortions that may impair subsequent predictive attempts. The attention to dreams is probably a legacy of psychoanalytic influence but is in direct opposition to current theoretical and empirical emphases.

Theoretical Implications

Some theoretical implications may be derived despite this study's basically applied objectives. Because of the difference between what psychiatrists say and what they do with psychological testing information, all investigations of their judgment relying on self-report must be suspect. Psychological testing information exerted an influence over the actual assessment yet remained unacknowledged by the clinicians.

It is quite evident that California psychiatrists are not attending to psychosocial support, one of the environmental factors many contemporary experts would recommend. This may be due to a lack of information by practitioners or a tendency to rely on the outdated developmental and psychoanalytic information with which they were trained on the average of nearly 16 years ago.

There is no literature directly comparable to this present investigation. The voluminous literature surrounding testing as means of predicting suicide, violence and other behavior reflects the continuing hope that psychological testing will derive quantitative answers from highly qualitative data. This investigation suggests that, although psychiatrists are cognitively aware of the limitations of testing, they still believe or otherwise emotionally respond to testing when available.

Limitations of this Study

This study was restricted to psychiatrists in California. Several subjects noted that California commitment procedures were

highly structured and perhaps unique. Furthermore, other mental health professionals involved in such hospitalization procedures may have somewhat different parameters of judgment and decision-making.

Beyond sampling limitations, this study is also limited by its utilization of vignettes as analogues to actual patient interviews. As some subjects pointed out, the intuitive element was missing. Also, the information provided was less than comprehensive. Many interviewers would have pursued other information before concluding the judgmental process. The need for additional history and projective testing were specifically mentioned by subjects. At the same time, these concerns may be mitigated by the fact that 75% of the subjects had no criticisms about the experimental method.

In retrospect, the psychosocial variable appeared weaker than either the history of violence or the psychological testing variables. This support was only mentioned in one sentence and was not behaviorally linked to past violence. The vignettes were constructed in this manner to accurately portray the limited information available during an emergency scenario. Nevertheless, a stronger psychosocial support representation may have tested the influence of this variable more definitively.

Recommendations for Further Studies

The present study was basically exploratory and, as such, raised more questions than it answered. Future studies might profitably explore the information actually requested by psychiatrists when

assessing dangerousness, the judgmental patterns of other mental health professionals, the influence local laws exert on decision-making, and the efficacy of the vignette analogue as a research tool.

Some variables, such as alcohol abuse, were held constant in this study but received much interest from the subjects. Alcohol use, in particular, is reported by some to potentiate violence (Schmidt & Witte, 1978; Wolfgang, 1958) and by others to attenuate it (Bard, 1982). These competing suppositions illuminate alcohol as an important area for further research.

In this study a composite clinical picture was the basis for the assessment of dangerousness. This somewhat vague and isolated quality of dangerousness may be overshadowed, in terms of predictive value, by the nature of the situation itself. Steadman (1982) reports a vast number of situational factors, such as the content of the dispute, exact location, time of day, and so forth, which could qualify for consideration in both research and clinical practice. Mulvey and Lidz (1984) note, however, that the situation has long been neglected as a dimension of psychological research.

A computer simulation of a patient interview might be a significant step toward a standardized, replicable and lifelike interview. This would allow a variety of experimental variations in the patient's presentation. Such a format would also allow many more cues, including subtle ones, to be available to the subjects.

Recommendations for Training

The present findings suggest that changes in professional training may be needed. Even though psychiatrists give little overt or conscious value to psychological testing, they do incorporate testing in assessments of dangerousness. This suggests that standard didactic techniques may not be sufficient to modify such habits. Programmed texts, videotaped interviews, and computer simulations may be necessary to shape assessment behavior so that it accommodates the best information available. In the same vein, the subjects did not give due attention to psychosocial support, even though emphasized in current theory and research.

As the experts in psychological testing, psychologists should be cautioned in their training as to the influence such testing has upon those who utilize it. The predictive limitations of psychometrics must be conveyed to the same extent as is the potential value of psychological assessment.

Summary

The failure to accurately predict violent potential in psychiatric patients is an area of much current popular and professional interest. Violent episodes, such as John Hinkley's attempted presidential assassination, have led many to question the predictive accuracy of mental health professionals. Psychology literature confirms the inaccuracy of clinical predictions but contemporary theorists suggest improvements by substituting actuarial and

environmental information for the psychodynamic and developmental information employed by many practitioners. Virtually all studies have shown psychological testing to be a poor predictor of violence.

The present investigation utilized typed vignettes which described a brief, fictionalized interview as an analogue to an actual contact with a patient. A recent history of violence (an actuarial factor), support by a caring person (an environmental factor), and psychological testing information were systematically manipulated among the vignettes. Vignettes were mailed to psychiatrists in California who were asked to rate dangerousness and decide if emergency hospitalization was required for the fictional patient. Each psychiatrist received one of 16 possible vignettes. The sixteen vignettes represent two hypothetical patient scenarios and all permutations of the three manipulated variables. One hundred and sixty responses were included in the statistical analyses.

Analysis of variance indicated that both recent history of violence and psychological testing significantly affected the psychiatrists' assessment of the patient's dangerousness. These same two variables also significantly influenced the subjects' decision to hospitalize. Psychosocial support (the manipulated environmental variable) did not significantly influence the subjects' judgments.

The subjects reported that a recent history of violence influenced their decision making but did not make a similar report about psychological testing. This suggests a substantial gap between what

the subjects say and what they do with psychological testing information when assessing dangerousness.

Post-hoc correlational procedures indicated that psychiatrists who had been frequently involved with past involuntary commitments were less likely to hospitalize identical patients than were the other psychiatrists. These commitment-experienced psychiatrists also tended to see the patients as less prone to erupt into violence. It may be that psychiatrists who have committed patients more frequently have had relatively more frequent encounters with volatile patients. In this professional environment these psychiatrists may have developed increased confidence in their own ability to clinically manage potentially violent patients.

The following implications can be drawn from this study. Psychiatrists in California incorporate a recent history of violence into their decision-making process but do not appear to give psychosocial support the attention warranted. Psychological testing exerts an unwarranted and possibly unconscious influence on the judgmental process. Psychologists and psychiatrists should be explicitly educated about the limitations as well as the strengths of psychological testing.

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APPENDICES

- A. COVER LETTER
- B. VIGNETTE MATRIX
- C. VIGNETTES
- D. QUESTIONNAIRE
- E. REMINDER

APPENDIX A
COVER LETTER



Texas Tech University

Department of Psychology

The enclosed case vignette and questionnaire are components of a dissertation research project designed to examine the prediction of dangerousness. I suspect that you are extremely busy and approach such requests without enthusiasm. This study, however, offers a meaningful topic, a sophisticated experimental design, and requires merely five minutes of your time. Only a qualified psychiatrist such as you can provide the professional judgement needed to bring this research to fruition. Anonymity will, of course, be preserved.

I would be very grateful if you would participate in our project.

Sincerely,

E. Roger Williams
Ph.D. Candidate in Clinical Psychology
Texas Tech University

P.S. I will be glad to send you a summary of our findings if you make a note to that effect at the bottom of the questionnaire.

THE CLINICAL PREDICTION OF DANGEROUSNESS(U) AIR FORCE
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MAY 85 AFIT/CI/NR-85-133D

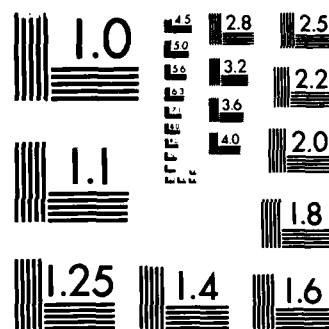
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MICROCOPY RESOLUTION TEST CHART
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APPENDIX B

VIGNETTE MATRIX

APPENDIX B

MATRIX OF INDEPENDENT VARIABLES

VIGNETTE A/B

Vignette	Psychological	Psychosocial	Recent
<u>Variations</u>	<u>Testing</u>	<u>Support</u>	<u>Dangerousness</u>
1.	high	no	yes
2.	high	yes	yes
3.	high	yes	no
4.	high	no	no
5.	low	no	yes
6.	low	yes	yes
7.	low	yes	no
8.	low	no	no

APPENDIX C

VIGNETTES

Following in order:

Vignettes

A1

A2

A3

A4

A5

A6

A7

A8

Vignettes

B1

B2

B3

B4

B5

B6

B7

B8

Vignette A1

James E. is a 26 year old white male who was referred to this clinic by his spouse because of his continuing anger and physical threats directed toward his employer. James, resistant to the interview, stated that another employee was unfairly promoted over him, because of his employer's favoritism. He was unable to explain, however, the intensity of his reaction. During his mental status examination his cognitive functions were generally intact, with the exception of his obsessive need to "get even" with his employer. His affective state was volatile and dominated by anger. He admitted a recent violent fistfight which he provoked while dining in a nice restaurant with his wife. His consumption of alcohol has recently increased and he reports disturbing dreams in which he acts out his violence on others. In his dreams he slashes and otherwise mutilates people who have offended him. His wife appeared irritated by his behavior and said she didn't think James should remain at home.

Psychological testing (MMPI) was administered to the patient just prior to his interview. The profile was valid for interpretation, with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated above 70 T-score. People with this MMPI pattern usually have a lifelong history of severe maladjustment and do not respond well to psychological interventions. They are chronically hostile, argumentative, resentful and suspicious. They tend to transfer blame for their problems onto others and to convert their emotional responses into anger. Explosive outbursts of aggression are probable, therefore extreme caution should be exercised with this patient.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely	Moderately	Minimally
Dangerous	Dangerous	Dangerous

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal	Moderate	Extreme
Provocation	Provocation	Provocation

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette A2

James E. is a 26 year old white male who was referred to this clinic by his spouse because of his continuing anger and physical threats directed toward his employer. James, resistant to the interview, stated that another employee was unfairly promoted over him, because of his employer's favoritism. He was unable to explain, however, the intensity of his reaction. During his mental status examination his cognitive functions were generally intact, with the exception of his obsessive need to "get even" with his employer. His affective state was volatile and dominated by anger. He admitted a recent violent fistfight which he provoked while dining in a nice restaurant with his wife. His consumption of alcohol has recently increased and he reports disturbing dreams in which he acts out his violence on others. In his dreams he slashes and otherwise mutilates people who have offended him. His wife displayed affection and concern for James during the interview.

Psychological testing (MMPI) was administered to the patient just prior to his interview. The profile was valid for interpretation, with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated above 70 T-score. People with this MMPI pattern usually have a lifelong history of severe maladjustment and do not respond well to psychological interventions. They are chronically hostile, argumentative, resentful and suspicious. They tend to transfer blame for their problems onto others and to convert their emotional responses into anger. Explosive outbursts of aggression are probable, therefore extreme caution should be exercised with this patient.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely	Moderately	Minimally
Dangerous	Dangerous	Dangerous

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal	Moderate	Extreme
Provocation	Provocation	Provocation

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette A3

James E. is a 26 year old white male who was referred to this clinic by his spouse because of his continuing anger and physical threats directed toward his employer. James, resistant to the interview, stated that another employee was unfairly promoted over him, because of his employer's favoritism. He was unable to explain, however, the intensity of his reaction. During his mental status examination his cognitive functions were generally intact, with the exception of his obsessive need to "get even" with his employer. His affective state was volatile and dominated by anger. Both he and his wife denied any recent physical display of anger. His consumption of alcohol has recently increased and he reports disturbing dreams in which he acts out his violence on others. In his dreams he slashes and otherwise mutilates people who have offended him. His wife displayed affection and concern for James during the interview.

Psychological testing (MMPI) was administered to the patient just prior to his interview. The profile was valid for interpretation, with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated above 70 T-score. People with this MMPI pattern usually have a lifelong history of severe maladjustment and do not respond well to psychological interventions. They are chronically hostile, argumentative, resentful and suspicious. They tend to transfer blame for their problems onto others and to convert their emotional responses into anger. Explosive outbursts of aggression are probable, therefore extreme caution should be exercised with this patient.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely	Moderately	Minimally
Dangerous	Dangerous	Dangerous

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal	Moderate	Extreme
Provocation	Provocation	Provocation

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette A4

James E. is a 26 year old white male who was referred to this clinic by his spouse because of his continuing anger and physical threats directed toward his employer. James, resistant to the interview, stated that another employee was unfairly promoted over him, because of his employer's favoritism. He was unable to explain, however, the intensity of his reaction. During his mental status examination his cognitive functions were generally intact, with the exception of his obsessive need to "get even" with his employer. His affective state was volatile and dominated by anger. Both he and his wife denied any recent physical display of anger. His consumption of alcohol has recently increased and he reports disturbing dreams in which he acts out his violence on others. In his dreams he slashes and otherwise mutilates people who have offended him. His wife appeared irritated by his behavior and said she didn't think James should remain at home.

Psychological testing (MMPI) was administered to the patient just prior to his interview. The profile was valid for interpretation, with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated above 70 T-score. People with this MMPI pattern usually have a lifelong history of severe maladjustment and do not respond well to psychological interventions. They are chronically hostile, argumentative, resentful and suspicious. They tend to transfer blame for their problems onto others and to convert their emotional responses into anger. Explosive outbursts of aggression are probable, therefore extreme caution should be exercised with this patient.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette A5

James E. is a 26 year old white male who was referred to this clinic by his spouse because of his continuing anger and physical threats directed toward his employer. James, resistant to the interview, stated that another employee was unfairly promoted over him, because of his employer's favoritism. He was unable to explain, however, the intensity of his reaction. During his mental status examination his cognitive functions were generally intact, with the exception of his obsessive need to "get even" with his employer. His affective state was volatile and dominated by anger. He admitted a recent violent fistfight which he provoked provoked while dining in a nice restaurant with his wife. His consumption of alcohol has recently increased and he reports disturbing dreams in which he acts out his violence on others. In his dreams he slashes and otherwise mutilates people who have offended him. His wife appeared irritated by his behavior and said she didn't think James should remain at home.

psychological testing was administered to the patient just prior to his interview. The profile was valid for interpretation with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated between 65 and 70 T-score. This profile is not indicative of significant maladjustment, but does suggest distinct personality features. The patient is interpersonally sensitive, and although he can think clearly, he may be easily offended by criticism. He appears to be experiencing a degree of conflict, which combined with his high energy level, may result in agitation if external restrictions are applied.

please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely	Moderately	Minimally
Dangerous	Dangerous	Dangerous

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal	Moderate	Extreme
Provocation	Provocation	Provocation

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette A6

James E. is a 26 year old white male who was referred to this clinic by his spouse because of his continuing anger and physical threats directed toward his employer. James, resistant to the interview, stated that another employee was unfairly promoted over him, because of his employer's favoritism. He was unable to explain, however, the intensity of his reaction. During his mental status examination his cognitive functions were generally intact, with the exception of his obsessive need to "get even" with his employer. His affective state was volatile and dominated by anger. He admitted a recent violent fistfight which he provoked while dining in a nice restaurant with his wife. His consumption of alcohol has recently increased and he reports disturbing dreams in which he acts out his violence on others. In his dreams he slashes and otherwise mutilates people who have offended him. His wife displayed affection and concern for James during the interview.

Psychological testing was administered to the patient just prior to his interview. The profile was valid for interpretation with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated between 65 and 77 T-score. This profile is not indicative of significant maladjustment, but does suggest distinct personality features. The patient is interpersonally sensitive, and although he can think clearly, he may be easily offended by criticism. He appears to be experiencing a degree of conflict, which combined with his high energy level, may result in agitation if external restrictions are applied.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette A7

James E. is a 26 year old white male who was referred to this clinic by his spouse because of his continuing anger and physical threats directed toward his employer. James, resistant to the interview, stated that another employee was unfairly promoted over him, because of his employer's favoritism. He was unable to explain, however, the intensity of his reaction. During his mental status examination his cognitive functions were generally intact, with the exception of his obsessive need to "get even" with his employer. His affective state was volatile and dominated by anger. Both he and his wife denied any recent physical display of anger. His consumption of alcohol has recently increased and he reports disturbing dreams in which he acts out his violence on others. In his dreams he slashes and otherwise mutilates people who have offended him. His wife displayed affection and concern for James during the interview.

Psychological testing was administered to the patient just prior to the interview. The profile was valid for interpretation with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated between 65 and 70 T-score. This profile is not indicative of significant maladjustment, but does suggest distinct personality features. The patient is interpersonally sensitive, and although he can think clearly, he may be easily offended by criticism. He appears to be experiencing a degree of conflict, which combined with his high energy level, may result in agitation if external restrictions are applied.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette A8

James E. is a 26 year old white male who was referred to this clinic by his spouse because of his continuing anger and physical threats directed toward his employer. James, resistant to the interview, stated that another employee was unfairly promoted over him, because of his employer's favoritism. He was unable to explain, however, the intensity of his reaction. During his mental status examination his cognitive functions were generally intact, with the exception of his obsessive need to "get even" with his employer. His affective state was volatile and dominated by anger. Both he and his wife denied any recent physical display of anger. His consumption of alcohol has recently increased and he reports disturbing dreams in which he acts out his violence on others. In his dreams he slashes and otherwise mutilates people who have offended him. His wife appeared irritated by his behavior and said she didn't think James should remain at home.

Psychological testing was administered to the patient just prior to his interview. The profile was valid for interpretation with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated between 65 and 70 T-score. This profile is not indicative of significant maladjustment, but does suggest distinct personality features. The patient is interpersonally sensitive, and although he can think clearly, he may be easily offended by criticism. He appears to be experiencing a degree of conflict, which combined with his high energy level, may result in agitation if external restrictions are applied.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette B1

Robert W. is a 26 year old white male who was accompanied to this clinic by his roommate because of his erratic behavior and threats of violence. Robert broke up with his fiancée about three weeks ago and has since become increasingly agitated. He feels that his fiancée was disenchanted by unfounded gossip, and that she should have displayed more faith in him. He has repeatedly threatened to "teach her a lesson." He also acknowledges impulses to commit violent acts and was found yesterday choking a neighbor's dog. He was belligerent and restless throughout the interview, although his thought processes appeared quite intact. He has been sleeping very little during the past week, and has kept detailed written notes which he hides whenever discovered. His roommate, who has lived with him for five years, appeared bored by the proceedings and wanted Robert hospitalized.

Psychological testing (MMPI) was administered to the patient just prior to his interview. The profile was valid for interpretation, with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated above 70 T-score. People with this MMPI pattern usually have a lifelong history of severe maladjustment and do not respond well to psychological interventions. They are chronically hostile, argumentative, resentful and suspicious. They tend to transfer blame for their problems onto others and to convert their emotional responses into anger. Explosive outbursts of aggression are probable, therefore extreme caution should be exercised with this patient.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely	Moderately	Minimally
Dangerous	Dangerous	Dangerous

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal	Moderate	Extreme
Provocation	Provocation	Provocation

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette B2

Robert W. is a 26 year old white male who was accompanied to this clinic by his roommate because of his erratic behavior and threats of violence. Robert broke up with his fiancée about three weeks ago and has since become increasingly agitated. He feels that his fiancée was disenchanted by unfounded gossip, and that she should have displayed more faith in him. He has repeatedly threatened to "teach her a lesson." He also acknowledges impulses to commit violent acts and was found yesterday choking a neighbor's dog. He was belligerent and restless throughout the interview, although his thought processes appeared quite intact. He has been sleeping very little during the past week, and has kept detailed written notes which he hides whenever discovered. His roommate, who has lived with him for five years, displayed support and concern for Robert throughout the interview.

Psychological testing (MMPI) was administered to the patient just prior to his interview. The profile was valid for interpretation, with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated above 70 T-score. People with this MMPI pattern usually have a lifelong history of severe maladjustment and do not respond well to psychological interventions. They are chronically hostile, argumentative, resentful and suspicious. They tend to transfer blame for their problems onto others and to convert their emotional responses into anger. Explosive outbursts of aggression are probable, therefore extreme caution should be exercised with this patient.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette B3

Robert W. is a 26 year old white male who was accompanied to this clinic by his roommate because of his erratic behavior and threats of violence. Robert broke up with his fiancée about three weeks ago and has since become increasingly agitated. He feels that his fiancée was disenchanted by unfounded gossip, and that she should have displayed more faith in him. He has repeatedly threatened to "teach her a lesson." He also acknowledges impulses to commit violent acts but has been able to control these tendencies. He was belligerent and restless throughout the interview, although his thought processes appeared quite intact. He has been sleeping very little during the past week, and has kept detailed written notes which he hides whenever discovered. His roommate, who has lived with him for five years, displayed support and concern for Robert throughout the interview.

Psychological testing (MMPI) was administered to the patient just prior to his interview. The profile was valid for interpretation, with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated above 70 T-score. People with this MMPI pattern usually have a lifelong history of severe maladjustment and do not respond well to psychological interventions. They are chronically hostile, argumentative, resentful and suspicious. They tend to transfer blame for their problems onto others and to convert their emotional responses into anger. Explosive outbursts of aggression are probable, therefore extreme caution should be exercised with this patient.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette B4

Robert W. is a 26 year old white male who was accompanied to this clinic by his roommate because of his erratic behavior and threats of violence. Robert broke up with his fiancée about three weeks ago and has since become increasingly agitated. He feels that his fiancée was disenchanted by unfounded gossip, and that she should have displayed more faith in him. He has repeatedly threatened to "teach her a lesson." He also acknowledges impulses to commit violent acts but has been able to control these tendencies. He was belligerent and restless throughout the interview, although his thought processes appeared quite intact. He has been sleeping very little during the past week, and has kept detailed written notes which he hides whenever discovered. His roommate, who has lived with him for five years, appeared bored by the proceedings and wanted Robert hospitalized.

Psychological testing (MMPI) was administered to the patient just prior to his interview. The profile was valid for interpretation, with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated above 70 T-score. People with this MMPI pattern usually have a lifelong history of severe maladjustment and do not respond well to psychological interventions. They are chronically hostile, argumentative, resentful and suspicious. They tend to transfer blame for their problems onto others and to convert their emotional responses into anger. Explosive outbursts of aggression are probable, therefore extreme caution should be exercised with this patient.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette B5

Robert W. is a 26 year old white male who was accompanied to this clinic by his roommate because of his erratic behavior and threats of violence. Robert broke up with his fiancée about three weeks ago and has since become increasingly agitated. He feels that his fiancée was disenchanted by unfounded gossip, and that she should have displayed more faith in him. He has repeatedly threatened to "teach her a lesson." He also acknowledges impulses to commit violent acts and was found yesterday choking a neighbor's dog. He was belligerent and restless throughout the interview, although his thought processes appeared quite intact. He has been sleeping very little during the past week, and has kept detailed written notes which he hides whenever discovered. His roommate, who has lived with him for five years, appeared bored by the proceedings and wanted Robert hospitalized.

Psychological testing was administered to the patient just prior to his interview. The profile was valid for interpretation with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated between 65 and 70 T-score. This profile is not indicative of significant maladjustment, but does suggest distinct personality features. The patient is interpersonally sensitive, and although he can think clearly, he may be easily offended by criticism. He appears to be experiencing a degree of conflict, which combined with his high energy level, may result in agitation if external restrictions are applied.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette B6

Robert W. is a 26 year old white male who was accompanied to this clinic by his roommate because of his erratic behavior and threats of violence. Robert broke up with his fiancée about three weeks ago and has since become increasingly agitated. He feels that his fiancée was disenchanted by unfounded gossip, and that she should have displayed more faith in him. He has repeatedly threatened to "teach her a lesson." He also acknowledges impulses to commit violent acts and was found yesterday choking a neighbor's dog. He was belligerent and restless throughout the interview, although his thought processes appeared quite intact. He has been sleeping very little during the past week, and has kept detailed written notes which he hides whenever discovered. His roommate, who has lived with him for five years, displayed support and concern for Robert throughout the interview.

Psychological testing was administered to the patient just prior to his interview. The profile was valid for interpretation with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated between 65 and 70 T-score. This profile is not indicative of significant maladjustment, but does suggest distinct personality features. The patient is interpersonally sensitive, and although he can think clearly, he may be easily offended by criticism. He appears to be experiencing a degree of conflict, which combined with his high energy level, may result in agitation if external restrictions are applied.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette B7

Robert W. is a 26 year old white male who was accompanied to this clinic by his roommate because of his erratic behavior and threats of violence. Robert broke up with his fiancée about three weeks ago and has since become increasingly agitated. He feels that his fiancée was disenchanted by unfounded gossip, and that she should have displayed more faith in him. He has repeatedly threatened to "teach her a lesson." He also acknowledges impulses to commit violent acts but has been able to control these tendencies. He was belligerent and restless throughout the interview, although his thought processes appeared quite intact. He has been sleeping very little during the past week, and has kept detailed written notes which he hides whenever discovered. His roommate, who has lived with him for five years, displayed support and concern for Robert throughout the interview.

Psychological testing was administered to the patient just prior to his interview. The profile was valid for interpretation with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated between 65 and 70 T-score. This profile is not indicative of significant maladjustment, but does suggest distinct personality features. The patient is interpersonally sensitive, and although he can think clearly, he may be easily offended by criticism. He appears to be experiencing a degree of conflict, which combined with his high energy level, may result in agitation if external restrictions are applied.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

Vignette B8

Robert W. is a 26 year old white male who was accompanied to this clinic by his roommate because of his erratic behavior and threats of violence. Robert broke up with his fiancée about three weeks ago and has since become increasingly agitated. He feels that his fiancée was disenchanted by unfounded gossip, and that she should have displayed more faith in him. He has repeatedly threatened to "teach her a lesson." He also acknowledges impulses to commit violent acts but has been able to control these tendencies. He was belligerent and restless throughout the interview, although his thought processes appeared quite intact. He has been sleeping very little during the past week, and has kept detailed written notes which he hides whenever discovered. His roommate, who has lived with him for five years, appeared bored by the proceedings and wanted Robert hospitalized.

Psychological testing was administered to the patient just prior to his interview. The profile was valid for interpretation with scales 4 (Pd-Psychopathic Deviate), 6 (Pa-Paranoia), and 9 (Ma-Hypomania) elevated between 65 and 70 T-score. This profile is not indicative of significant maladjustment, but does suggest distinct personality features. The patient is interpersonally sensitive, and although he can think clearly, he may be easily offended by criticism. He appears to be experiencing a degree of conflict, which combined with his high energy level, may result in agitation if external restrictions are applied.

Please answer the following by putting an "X" above the appropriate spot on the horizontal scale.

Estimate the degree of dangerousness of this patient:

Extremely Dangerous	Moderately Dangerous	Minimally Dangerous
------------------------	-------------------------	------------------------

Would you hospitalize due to dangerousness at this time:
Yes _____ No _____

What level of provocation is likely to elicit any violence from this patient:

Minimal Provocation	Moderate Provocation	Extreme Provocation
------------------------	-------------------------	------------------------

Which feature of the vignette do you think best reflects the patient's level of dangerousness:

What form of violence is this patient most likely to display:

APPENDIX D
QUESTIONNAIRE

QUESTIONNAIRE

Please answer the questions by putting an "X" above the appropriate spot on the horizontal scale.

1. How many years have you been practicing psychiatry since completion of your residency?

1 year 7 years 15 years longer

2. Approximately how many times during the past twelve months have you been involved in an emergency (involuntary) commitment:

None	5 times	10 times	more
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3. Do you consider emergency (involuntary) commitments to be:

Simple tasks	Moderately difficult tasks	Complex and difficult tasks
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4. How would you estimate your degree of comfort when involved with an emergency commitment:

Quite comfortable	Moderately comfortable	very uncomfortable
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5. What percentage of your workload consists of inpatient contact:

None	50 percent	100 percent
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6. Do your answers reflect your most relevant thoughts about emergency hospitalization and involuntary commitment? _____ If not, please make comments below.

APPENDIX E

REMINDER



Texas Tech University

Department of Psychology

About three weeks ago I sent you a clinical vignette and questionnaire. I suspect that you are extremely busy and approach such requests without enthusiasm. I urge you, however, to consider completing the attached copy of my original request. This value of this research rests upon professional judgement which only a qualified psychiatrist such as you can provide. The topic is meaningful, the experimental design is sophisticated, and only five minutes of your time are needed.

I would be very grateful if you would participate in our project.

Sincerely,

E. Roger Williams
Ph.D. Candidate in Clinical Psychology
Texas Tech University

P.S. I will be glad to send you a summary of our findings if you make a note to that effect at the bottom of the questionnaire.

END

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