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## Multiple Schedule of Affective Disorders and Schizophrenia (SADS) in the Assessment of Criminal Defendants

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**ABSTRACT:** Psychiatric and psychological assessment of criminal defendants is often complicated by the retrospective nature requiring (1) an overreliance on self-reported data and (2) the need to achieve a high degree of certainty in formulating the diagnosis and subsequent expert opinion within the context of an adversarial evaluation. The Multiple Schedule of Affective Disorders and Schizophrenia (SADS) evaluation involves the application of an extensive diagnostic interview that has demonstrated a high degree of reliability and satisfactory validity in making current and lifetime diagnoses. The multiple SADS entails sequential administrations of the SADS, first to the defendant and later to significant others regarding the defendant's functioning during the time period in question. This comprehensive approach allows for the systematic examination of individual symptoms and the clear delineation of disparities and areas of agreement. Usefulness of the multiple SADS evaluation is exemplified in a case study involving criminal responsibility.

**KEYWORDS:** psychiatry, jurisprudence, Schedule of Affective Disorders and Schizophrenia

Considerable advances have been made during the last decade in the assessment of criminal defendants, both through the adaptation of general diagnostic methods and implementation of specialized techniques [1,2]. One such advance has been the application of semi-structured diagnostic interviews such as the Schedule of Affective Disorders and Schizophrenia (SADS) to specialized forensic science evaluations. The SADS provides a standardized approach to forensic science evaluations based on extensive reliability and validity studies. In addition, it provides a greater flexibility than traditional psychometric tests in addressing retrospective diagnoses and specific legal standards.

Forensic psychological evaluations are complicated by the following factors: (1) their adversarial quality, (2) their retrospective assessment, and (3) the need for high degree of certainty in formulating the diagnosis and offering an expert opinion. Each of these three factors will be discussed briefly below in providing a background for the implementation of a multiple SADS evaluation.

An implicit characteristic of forensic psychiatric and psychological evaluations is the adversarial nature of such assessments. The defendant, who should be given a formal

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warning regarding the purposes of the forensic psychological evaluation and its nonconfidential and nontherapeutic nature [3], is generally aware of the far-reaching consequences of this evaluation and its potential impact on the subsequent legal outcome. Forensic clinicians, even those retained by the defense, are not being consulted for the defendant's "best interest" but as to whether the defendant meets a specific legal standard. Awareness of this adversarial context may well influence the defendant's self-report and response style, exerting pressures ranging from withholding potentially self-damaging information and defensiveness to blatant attempts at malingering. Rogers [4] found in an extensive collaborative study of 240 insanity evaluatees that 18% had suspected or definite malingering and 30% had distorted or withheld relevant clinical data. Thus, forensic psychological evaluations are rendered more complex because of the effects of adversariness on the assessment process [5].

The retrospective nature of many forensic psychological evaluations increases the difficulty in conducting comprehensive and accurate assessments. Clinical observation becomes increasingly less relevant as time periods increase between the designated period (for example, time of the crime in an insanity evaluation or time of the trauma in a personal injury case) and the current evaluation. The forensic clinician is forced to rely more heavily on self-reported data and observations made by victims, witnesses, and arresting officers in making a retrospective assessment. Factors that potentially limit this process include (1) psychogenic or organic amnesias, (2) involuntary deficits or distortion of memory as a result of psychopathology and substance abuse, and (3) normal distortions and memory loss over time. On this third point, an extensive literature on the accuracy of eyewitness testimony and memory stability [6, 7] demonstrates an increasing loss of memory over time with individuals "filling in" plausible or self-justifying details which become indistinguishable from the actual memories. Further, individuals become more certain of their memories over time while memory paradoxically becomes less accurate [8]. In addition, such memory deficits and distortions affect not only the defendant but also other observers of the criminal behavior upon whose "objective" recall forensic science examiners rely.

Forensic psychological evaluations require a high degree of certainty, both because of their important consequences for the defendant and community and the finality of such determinations. Most general psychiatric practice has a prospective orientation in which inaccuracies in diagnosis or treatment or both may be subsequently identified and remedied at a later date. This is in direct contrast with forensic psychological evaluations in which the legal outcome, for all practical purposes, is inalterable and inaccessible to additional clinical data. These factors place an additional burden on the forensic clinician to be more comprehensive in his/her clinical methods and more certain before rendering an opinion. Further, forensic science experts are asked to testify with a "reasonable degree of medical or scientific certainty." While the meaning of the standard is yet to be clearly articulated [9], it places an additional responsibility on the forensic clinician regarding the certitude of his/her diagnoses and subsequent opinions.

### **Description of the SADS**

The SADS was developed during the mid-1970s as part of an National Institute of Mental Health (NIMH) collaborative study on the psychobiology of depression [10, 11]. The SADS provides a systematic method of clinical inquiry by presenting general questions regarding phenomenology and specific probes for determining the severity, duration, and potential impact of individual psychiatric symptoms. Responses to these diagnostic questions and probes are quantified on six-point scales employing explicit criteria. This approach allows for the standardization of (1) the content of the clinical questions, (2) the ordering of the clinical questions, (3) detailed probes in areas of clinical ambiguity, and (4) quantified ratings of symptom severity.

The SADS [12] is divided into two components: Part I provides a comprehensive review of psychiatric symptoms during the last episode and the current time; Part II provides a longitudinal approach in reviewing prominent symptoms in the individual's history towards rendering lifetime psychiatric diagnoses. The cross-sectional approach of Part I can be utilized for examining other specific time periods (for example, the time of the crime or the personal injury) in direct comparison to symptoms reported in the current assessment [13].

The SADS has demonstrated exceptionally high reliability estimates both for inter-rater and test-retest reliability [11,14] and satisfactory reliability for lifetime diagnosis and symptoms [15,16]. In addition, the SADS draws its validity from the employment of research diagnostic criteria [17] which provide specific inclusion and exclusion criteria in establishing psychiatric diagnosis. The research diagnostic criteria, in spite of limitations on predicting outcome [18], provide stable diagnoses of mental disorders and form the basis of the current nomenclature, DSM-III [19].

Empirical studies have examined the clinical usefulness of the SADS in criminal responsibility evaluations [20,21]. The second of these studies incorporated data from the first ( $N = 28$ ) and examined a total of 78 SADS evaluations in the assessment of insanity. The study showed significant differences between sane and insane evaluatees on overall SADS scores for the period of the crime (Wilks' lambda = 3.70,  $p = 0.002$ ). This was accounted for by highly significant differences in psychotic features (including delusions, hallucinations, and formal thought disorder) and by moderate differences in endogenous features of depression and manic symptoms.

### Multiple SADS Format

Multiple SADS evaluations involve independent administrations of the clinical protocol in establishing multiple perspectives of the criminal defendant. Towards this end, the SADS is administered first to the defendant and subsequently to significant others (for example, witnesses and family members) who report their observations of the defendant. The multiple SADS provides a standardized clinical method of making comparisons from different perspectives of the defendant's psychological functioning during the designated period. This allows the clinician to assess in detail both the consistency and severity of reported symptoms. Such detailed clinical information for designated time periods facilitates the determination of the defendant's honesty and openness, the completion of a thorough retrospective assessment, and the establishment of the clinician's level of certainty in the diagnoses and expert opinion.

The multiple SADS evaluation follows, with little variation, the procedures used in the individual SADS administration. The SADS is typically administered to the defendant, after which a decision is made whether corroborative SADS are necessary. This decision includes such factors as (1) the apparent accuracy and completeness of the defendant's self-report, (2) the extent to which others may augment the present clinical data, (3) the degree of bias that other informants may possess, and (4) the willingness of other informants to participate in this evaluation. The forensic clinician must, in cases of clinical ambiguity, contact potential informants regarding their willingness and potential usefulness in participating in the multiple SADS assessment.

Administration of Part I of the SADS is the primary focus in the gathering from informants their observations of the defendant. This includes an extensive review of potential symptomatology both at the designated period (time of the crime) and during the current time. Data on Part II consisting of longitudinal information are important in making certain diagnoses, like antisocial personality disorder, or in cases where a prior psychiatric history is particularly relevant (personal injury claims). From a practical perspective, the multiple SADS evaluations are generally completed by the same forensic clinician. This procedure enables the clinician to target areas of clinical ambiguity or of

particular relevance or both to the legal standard through careful probing of informant's observations. In assessing informant's reports of the defendant, the clinician must be careful to distinguish true observations from impressions or speculations. It is essential that the clinician elicit *what* the informant saw or heard and *how* it was said. General statements or conclusions, regardless how well-intentioned, offer little to corroborate or disconfirm the available clinical data. The clinician must test the informant's actual memory of the defendant's previous behavior as well as the extent of his/her observations.

The multiple SADS data is integrated into a coherent report regarding the individual's diagnoses (retrospective and current), degree of certainty in that diagnosis, and a discussion of the clinical relevance of the reported psychopathology with the specific legal standard. Towards this end, the SADS was devised in conjunction with research diagnostic criteria which provide explicit criteria for what constitutes and does not constitute a specific mental disorder (that is, inclusion and exclusion criteria). Thus, the quantified symptoms from the multiple SADS evaluation may be directly translated to standard diagnostic categories. This combination of highly specific and quantified individual symptoms for retrospective and current diagnoses will assist in the clarification of psychological impairment and its relationship to the relevant legal standard.

### **Case Illustration**

E. T. was referred for an evaluation of criminal responsibility with respect to his murder of a police officer and attempted murder of a second police officer seven months before examination. E. T., a 40-year-old divorced black male, was diagnosed as a paranoid schizophrenic and had an extensive psychiatric history with six hospitalizations over the last 15 years. He also had multiple arrests for possession of marijuana, disorderly conduct, battery, public indecency, and violation of supervision.

The sequence of events surrounding the criminal offenses as reconstructed from police and witness reports was as follows: E. T., who was living in a nearby room, arrived at his mother's home at approximately 10:00 p.m. to eat supper. Since his mother did not trust him with a key to her home, he tapped with a pole on her second-story bedroom window (a customary practice) to gain admittance. This apparently suspicious behavior was observed by a passerby who called police to report a possible burglary. Minutes later, while E. T. was preparing a salad with a kitchen knife, a police officer responded to the complaint by knocking on the kitchen door. A brief struggle ensued upon the lawn in which the officer was fatally stabbed and his service revolver taken by the defendant. An exchange of gun fire between E. T. and a second responding police officer wounded both men and was followed by E. T.'s arrest.

### *Defendant's Report*

E. T. reported opening the kitchen door and seeing a black man in a dark blue suit, who vaguely reminded E. T. of someone who had attacked him nine years ago. He stated that the man then pointed a revolver at him and asked him to drop his kitchen knife. E. T.'s recollection of the following events was disjointed and fragmented, but included running to the garage to get a baseball bat and machete for his own defense, and observing gun shots exchanged between a uniformed police officer and a suspiciously parked car. He denied any criminal involvement and had no logical explanation for the events of that evening.

In retrospective evaluation of E. T.'s psychological functioning at the time of the crime, E. T. made many affirmative statements regarding his psychological health and general life situation. When confronted with reports of his marginal functioning and minimal social contact, he minimized these perspectives and admitted to only a few "temporary set-backs." The SADS was administered to E. T. to assess in detail the psychological impairment at the

time of the crime and at the current time. Because E. T. consistently overestimated his own abilities and adjustment and minimized any psychopathology, corroborative SADS were administered to his mother and former girlfriend.

### *Corroborative Reports*

E. T.'s mother was interviewed extensively on three occasions, two of which used the SADS diagnostic interview. Her basic presentation was a somewhat general description of how disturbed her son had been for the last 14 years and exemplified by one of her early statements. "E. T. is not a murderer, it's his mental illness." She described her relationship with E. T. as tenuous, with ongoing concerns about his irritability and potential aggressiveness. She therefore limited her contact with E. T. by paying his rent and giving him meals and a daily allowance. She reported that he had become somewhat more withdrawn and more irritable with her during the months before the alleged crimes. In the SADS evaluation, it became readily apparent how little she knew of E. T.'s day-to-day functioning or his specific psychological symptoms. In addition, it became clear that she was biased towards seeing E. T. as disturbed as possible. His mother, while not fabricating E. T.'s psychopathology, tended to give him "the benefit of the doubt." Her corroborative SADS therefore provided limited clinical data on E. T. but helpful ancillary information regarding her perspective and agenda.

A second corroborative SADS evaluation was conducted with E. T.'s girlfriend, D. S. D. S., who herself had several prior hospitalizations for a schizophrenic disorder and is currently in outpatient treatment, attempted to normalize E. T.'s disordered behavior. She reported, for example, that he would occasionally discuss with her his career as a professional baseball player, professional prize fighter, or famous musician, but that she felt he must be "fooling around" rather than truly delusional. When questioned about these grandiose verbalizations, E. T. became visibly upset with her. Because of her own serious psychological impairment as well as her desire to see E. T. as "OK," she minimized his psychopathology for the period of the crime. More specifically, D. S. saw many of E. T.'s negative symptoms (that is, social withdrawal and lack of goal-oriented behavior) as variants of normal behavior. The SADS evaluation assisted in reducing these global impressions of normality to specific symptoms of a varying intensity.

### *Clinical Synthesis*

Differences and commonalities in E. T.'s, his mother's, and his girlfriend's perception of his psychological functioning at the time of the offense were highlighted by the SADS comparisons of psychiatric symptoms. To illustrate this process, representative summary scales are presented in Figs. 1 through 4. These represent four of the eight summary scales for Part I of the SADS [10].

E. T. manifested little reported or observed depressive symptomatology during the time of the offense. Although there was some variability in describing his dysphoric mood (see Fig. 1), there was no evidence of any significant depression with respect to these reported symptoms. Likewise, comparisons of reported and observed symptoms with respect to associated and endogenous features of depression and suicide ideation and behavior were predominantly ranked as either 0 for no information or 1 for not present. Further, in reviewing E. T.'s retrospective functioning with respect to manic symptoms (see Fig. 2), he did not have sufficient change in mood (that is, either elevated, euphoric, or irritable) to warrant such a diagnosis. There was consensus regarding his grandiosity which appeared in subsequent portions of the SADS to be more related to a psychotic disorder than an affective disorder. Marked discrepancies were seen with accelerated speech and poor judgement.

E. T., while denying any symptoms or anxiety, was observed by others as having slight to

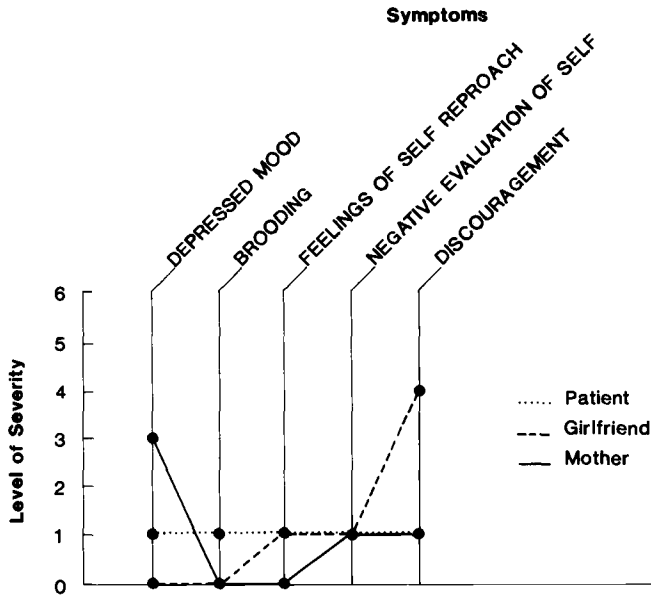


FIG. 1—Scale 1: depressive mood and ideation.

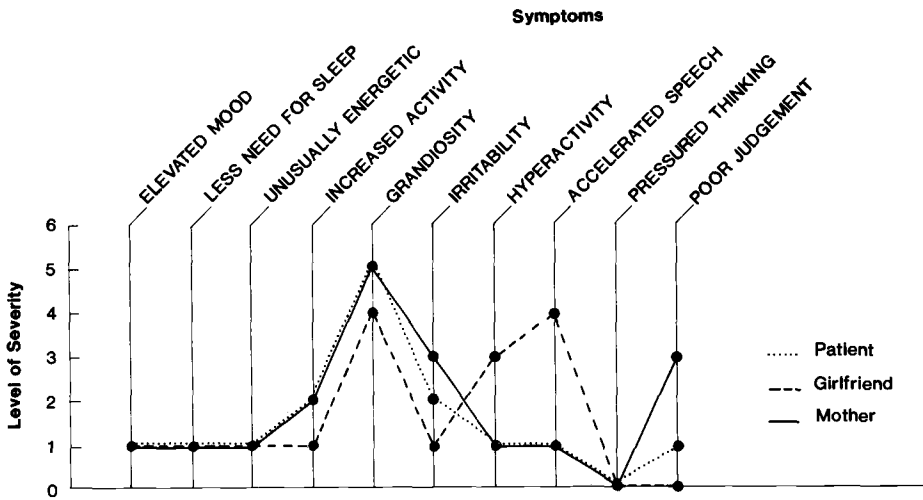


FIG. 2—Scale 6: manic syndrome.

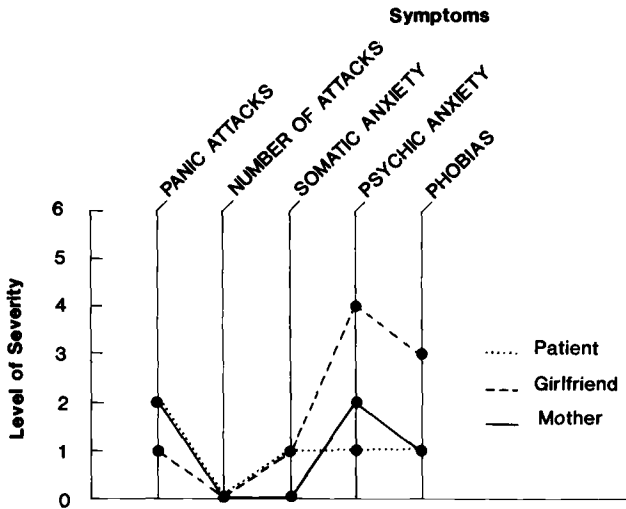


FIG. 3—Scale 5: anxiety.

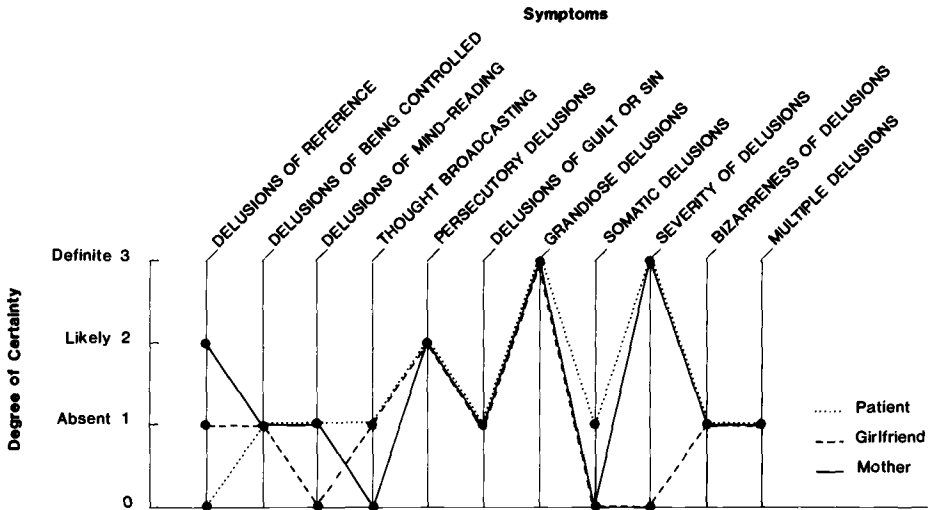


FIG. 4—Scale 7: delusions.

moderate psychic anxiety (Fig. 3). In addition, responses on symptoms which are not included in the eight summary scales manifested similar patterns with a great majority of scores ranging from 0 (no information) through 1 (not present) to 2 (clinically insignificant). Exceptions were for E. T.'s scores on anger and hostility; in examining his feelings of anger, resentment, and annoyance directed towards others, his scores ranged from 3 (mild) to 5 (marked) anger. Further, overt expression of anger manifested a similar pattern with mild to moderate severity.

Psychotic features played a prominent role in the retrospective diagnosis of E. T. In extensively probing, E. T. and his two informants were in complete consensus regarding his grandiose delusions and probable persecutory delusions, both of which significantly impacted his day-to-day function. Further, there was general consensus regarding the degree of bizarreness of his delusions, the absence of multiple delusions, the absence of delusions of guilt and being controlled. With respect to hallucinations, there was strong consensus regarding the absence of hallucinatory behavior during the last several years including the period of the offense. Other symptoms of psychosis (that is, Scale 8, formal thought disorder), were noncontributory with the exception of mildly illogical thinking. Finally, with respect to associated psychotic features, E. T. was rated as having a mild to moderate disorganization of his everyday functioning and was consistently observed as having blunted affect.

E. T. was diagnosed on the basis of the SADS and additional clinical interviews as experiencing a schizophrenic disorder, paranoid type with a chronic course. In synthesizing the available clinical information regarding his function at the time of the homicide and attempted homicide, there was clear evidence of active delusional beliefs which had a disorganizing affect on day-to-day existence. Rendering of an expert opinion on criminal responsibility was severely hampered, however, by the virtual absence of self-report data and the limitations/distortions of corroborative information. Bias on SADS data ranged from being "crazy" (sympathetic mother) to have "everyday problems" (schizophrenic girlfriend) and being a model of positive mental health (E. T.). Because of these severe limitations, the examiners chose to present to the court their clinical data with its consistencies and discrepancies on E. T.'s psychological functioning but declined to render an opinion regarding sanity.

## Conclusions

Selective implementation of the multiple SADS evaluation may assist the forensic clinician in standardizing his/her evaluation of criminal defendants. The multiple SADS evaluation provides a method for systematic organization of questions for the defendant and quantifying the responses with a high degree of reliability. This allows the forensic psychiatrist or psychologist to examine in depth which symptoms were present during the designated period and the severity of those symptoms.

Given the high standard for the forensic science expert of "a reasonable medical or scientific certainty," the thoroughness and comprehensiveness of a multiple SADS evaluation is justified in complicated cases. The above case demonstrated the need for such thoroughness and the resulting "no opinion." This point was underscored during an early discussion between the authors before the multiple SADS evaluation, in which one author hypothesized that E. T. was dissembling while the other suspected his criminal actions to be psychotically based. The multiple SADS, through its quantification of symptoms from several perspectives, assists in distinguishing reported and observed psychopathology from inferences and assumptions regarding the defendant. Thus, the initial clinical impressions, one as insane and one as criminally responsible, were transformed into a unanimous "no opinion" when confronted with the paucity of relevant clinical data.



## References

- [1] Grisso, T., "Assessment of Legal Competencies," paper presented at the Biennial Conference of the American Psychology-Law Society, Chicago, IL, Oct. 1983.
- [2] Saks, M., Grisso, T., Golding, S., and Rogers, R., "Advances in Psycholegal Psychological Assessment," symposium presented at the American Psychological Association, Annual Convention, San Diego, CA, Aug. 1983.
- [3] Gutheil, T. and Appelbaum, P., *Clinical Handbook of Psychiatry and the Law*, McGraw Hill, New York, 1982.
- [4] Rogers, R., *Conducting Insanity Evaluations*, Van Nostrand Reinhold, New York, in press.
- [5] Rogers, R. and Cavanaugh, J. L., "Nothing but the Truth: A Re-examination of Malingering," presented at the American Academy of Psychiatry and Law, New York, Oct. 1982.
- [6] Loftus, E. F., *Eyewitness Testimony*, Harvard University Press, Cambridge, MA, 1979.
- [7] Loftus, E. F. and Loftus, T. R., "On the Impermanence of Stored Information in the Human Brain," *American Psychologist*, Vol. 35, No. 5, May 1980, pp. 409-420.
- [8] Buckout, R., "Eyewitness Testimony," *Scientific American*, Vol. 6, 1974, pp. 23-31.
- [9] Rappeport, J., "Reasonable Medical Certainty," *Newsletter of American Academy of Psychiatry and Law*, Vol. 9, 1984, pp. 19-20.
- [10] Endicott, J. and Spitzer, R. L., "A Diagnostic Interview: The Schedule of Affective Disorders and Schizophrenia," presented at the Annual Meeting of the American Psychiatry Association, Toronto, Canada, May 1977.
- [11] Endicott, J. and Spitzer, R. L., "A Diagnostic Interview: The Schedule of Affective Disorders and Schizophrenia," *Archives of General Psychiatry*, Vol. 35, No. 7, July 1978, pp. 837-844.
- [12] Spitzer, R. L. and Endicott, J., *Schedule of Affective Disorders and Schizophrenia*, Biometric Research, New York, 1978.
- [13] Rogers, R. and Cavanaugh, J. L., "Application of the SADS Diagnostic Interview to Forensic Psychiatry," *Journal of Psychiatry and Law*, Vol. 9, No. 3, Nov. 1981, pp. 329-344.
- [14] Keller, M. B., Lavori, P. W., Andreason, N. C., Grove, W. M., Shapiro, R. W., Scheftner, W., and McDonald-Scott, P., "Test-Retest Reliability of Assessing Psychiatrically Ill Patients in a Multi-Center Design," *Journal of Psychiatry Research*, Vol. 16, No. 4, 1981, pp. 213-227.
- [15] Keller, M. B., Lavori, P. W., McDonald-Scott, P., Scheftner, W., Shapiro, R. W., and Croughan, J., "Reliability of Lifetime Diagnosis and Symptoms in Patients with a Current Psychiatric Disorder," *Journal of Psychiatry Research*, Vol. 16, No. 4, 1981, pp. 229-240.
- [16] Andreasen, N. C., Grove, W. A., Shapiro, R. W., Keller, M. B., Hirschfeld, R. A., and McDonald-Scott, M. A., "Reliability of Lifetime Diagnoses," *Archives of General Psychiatry*, Vol. 38, No. 4, April 1981, pp. 400-405.
- [17] Spitzer, R. L., Endicott, J., and Robins, E., "Research Criteria for Use in Psychiatric Research," *Archives of General Psychiatry*, Vol. 35, No. 6, June 1978, pp. 773-782.
- [18] Zwick, R., "Assessing the Psychometric Properties of Psychodiagnostic Systems. How Do the Research Diagnostic Criteria Measure Up?," *Journal of Consulting and Clinical Psychology*, Vol. 51, No. 1, Jan. 1983, pp. 117-131.
- [19] American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, APA Press, Washington, DC, 1980.
- [20] Rogers, R., Cavanaugh, J. L., and Dolmetsch, R., "Schedule of Affective Disorders and Schizophrenia, A Diagnostic Interview in Evaluations of Insanity: An Exploratory Study," *Psychological Reports*, Vol. 49, No. 1, Jan. 1981, pp. 135-138.
- [21] Rogers, R., Thatcher, A. A., and Cavanaugh, J. L., "Use of the SADS Diagnostic Interview in Evaluating Insanity," *Journal of Clinical Psychology*, Vol. 40, No. 6, Nov. 1984.

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