THE STRUCTURED CLINICAL INTERVIEW

Eugene I. Burdock & Anne S. Hardesty
Biometrics Research
Columbia University & New York State Department
of Mental Hygiene

The STRUCTURED CLINICAL INTERVIEW (SCI) consists of an interview schedule and an accompanying inventory of maladaptive behaviors. The interview is intended for use by the psychologist in any context in which he is interested in securing quantitative indices of salient psychopathology. It is an appropriate tool for such purposes as a community survey, psychological screening, classification of mental patients, measurement of response to treatment, and prognosis of outcome. It can be administered in a guidance clinic, counseling center, outpatient clinic, hospital or mental institution. The interview takes from 15 to 30 minutes and is designed to provide a uniform stimulus context so as to obtain comparability across subjects.

The inventory describes the evoked behavior of the subject, both verbalization and demeanor. The subject's verbal responses, physical appearance, and comportment are recorded on the inventory during the progress of the interview. The items call for dichotomous judgments and cover a wide range of psychopathological indicators.

The inventory was constructed by identifying in the psychological and psychiatric literature areas of psychopathology generally recognized as having symptom significance. Each of these areas was then broken down into molecular items of behavior. Thus each area is a subtest and the

1 Development of this interview was supported in part by PHS Grant-03546 from the National Institute of Mental Health.
inventory as a whole is a composite of these subtests.

The interview is constructed so as to direct the subject's attention toward significant areas of adaptation. However, the stimulus material is essentially neutral, making only an oblique approach to areas of potential pathology. Questions are phrased in such a way as to preclude simple "yes" or "no" responses. The interview thus resembles a projective technique in that the interviewer's statements or questions serve as ambiguous stimuli which the subject, to some extent, invests with his own meanings. This technique has the advantage of avoiding the possibility of suggesting the expected pathology. A highly suggestible subject will often respond to probing questions by agreeing that he suffers from most of the pathology implied in the questions. Although the stimuli are ambiguous, nevertheless the responses are evaluated only with reference to the selected units of behavior on the inventory. Typical stimuli are:

"Tell me something about yourself. What kinds of problems do you have?"

"What kind of an imagination do you have?"

"What has your social life been like?"

"How do you get along with the opposite sex?"

"How does your family treat you?"

"Tell me something that interests you in the news."
Instructions for Administering the Interview

Interviewer should identify himself, offer to shake hands and explain the purpose of the interview in a manner appropriate to the setting. The interviewer should always present the stimuli in precisely the form shown in the protocol.

Answers to "What kind of an imagination do you have?" vary from a non-committal "all right" to a frank report of delusional or hallucinatory experiences. An "all right" may be belied by obvious indication of hallucinations. Significant behavior, both reported and observed, is recorded on the corresponding part of the inventory. The questions about social relations and about getting along with the opposite sex commonly provoke verbal reports of problems. Often when no verbal report is forthcoming, increased movement, evasiveness or observable discomfort make for a significant response.

Strict adherence to the interview protocol provides a standard stimulus situation which minimizes the effect of the interviewer's behavior on the subject. The procedure to be followed by the interviewer is analogous to that recommended for use in the administration of such psychological tests as the Wechsler Adult Intelligence Scale and the Stanford-Binet Scale. For the inventory to qualify as a psychometric instrument, it is essential that the interviewer should not depart from the prescribed interview procedure.

In order to give a natural conversational quality to the interview as well as to make the stimuli fit the time and situation of the particular subject, a number of the stimuli are printed with an alternate word or phrase. The
interviewer should choose the appropriate alternative expression. The alternatives are indicated by being printed above and below the line. For example, on page one, the question: "What is this place?" occurs. If the setting for the interview is an institution of some kind, the interviewer should choose "building"; if the setting is some public place other than an institution, the interviewer should choose "place"; if the site is the subject's home or some other private residence, then the interviewer should choose the word "address".

A limited number of supplementary stimuli have been provided on the protocol in parentheses. A more extensive set of follow-up alternatives could seriously impair comparability across subjects. The interviewer need not record the subject's verbatim responses, as the stimulus material has been devised specifically to evoke responses for the accompanying inventory.

If the subject ignores or appears not to have heard one of the stimuli, the interviewer should repeat it in the same words. When the subject's response to the previous stimulus has been incomplete, the interviewer should follow-up with one of the standard alternative or supplementary stimuli. If the subject fails to complete his answer, the interviewer should prompt him to further disclosure by saying:

"Can you tell me more about it?"

If the subject's response refers to the past, the interviewer, in order to determine whether the pathology disclosed is current or characteristic (i.e. typical), should ask:

"How much of a problem is this for you?"
When the subject's response is considered complete, the interviewer should indicate interest or understanding by remarking:

"I see" or, "I understand" or, "Uh huh."

In this way he will encourage the subject to continue to provide significant responses to subsequent stimuli. Before proceeding to the next stimulus, the interviewer should wait until he is quite sure that the subject has completed his answer.

If the subject fails to respond to a specific question, the interviewer should wait quietly and with an air of expectancy for about half a minute to allow the silence to exercise some effect on the subject. He should then proceed to the alternative or the next question. Because mental patients are sometimes initially unresponsive but warm up as the interview proceeds, the interviewer should in such cases return to the beginning of the protocol and repeat the questions up to the point where the subject began to respond, following the same order and tempo as in the initial presentation.

If at the beginning the subject appears resistant or uneasy, the interviewer should seek to establish the necessary rapport before proceeding further. However, in order to maintain the standardized character of the interview, the interviewer should not expand the stimulus questions beyond the alternatives provided in the protocol.

If the subject appears not to understand a particular question and asks what it means, the interviewer should repeat the question placing emphasis on the important word in the question. He should not paraphrase it in his own words.
If a subject has anticipated any question in the protocol the interviewer, when he reaches that question should preface it with, "You (may) have answered this in part but..." For example, if in response to the question, "What kind of imagination do you have?" the subject mentions some of the things he thinks about, the interviewer should say: "You have answered this in part, but what kind of things do you think about?"

If the subject asks for clarification as to the time referred to in a question, the interviewer should repeat the question emphasizing the present tense of the verb or repeat the question adding "usually" to it. For example, in response to the question "How satisfying are your meals?", some subjects will ask, "Do you mean now or before I came to the hospital?" In such cases the interviewer should say, "How satisfying are your meals now?" When the interviewer asks, "What is your health like?" if the subject replies by inquiring, "Do you mean now or before I came here?" the interviewer should respond, "What is your health usually like?"

After the subject has responded to the question, "What about your sense of humor?" the interviewer, if the subject has smiled, should smile himself and say, "You haven't forgotten how to smile?" However, if the subject has not smiled up to this point, the interviewer should nevertheless smile himself and say, "You haven't forgotten how to smile?" If in response to the question, "How has your family been getting along?" the subject inquires whether the reference is to his parental or conjugal family, the interviewer should repeat the previous question, "With whom do you live?"
If the subject lives alone, the interviewer should proceed instead to the question, "Who is your nearest relative?"

**Recording the Observations**

The interviewer (or observer) should fill out the inventory as the interview is going on. This procedure insures that the information will be recorded while it is still fresh in mind.

Items which start with "Indicates," "Mentions," "Says," "Reports," require the observer to judge whether the subject has reported the substance of the content of the item. In order that the item be marked "true," it is not required that the subject must have expressed the pathology in precisely the words used in the item.

The inventory is not concerned with the background factors or case history. Behavior should therefore only be recorded when it either occurs at the time of the interview or is reported by the subject as a current or characteristic attitude or activity. For example, Item 14, "Indicates he has rages or fits of anger," requires that the subject tell substantially that this is a typical feature of his behavior. However, this item does not include acting-out behavior during the course of the interview. Such behavior would be picked up by Item 174, "Loses his temper or has a fit of anger." In the same way, if the subject has reported that he made a suicidal attempt, the interviewer would have pursued this report with appropriate follow-up questions: "Can you tell me more about it?" "How much of a problem is this for you?" Only if he is satisfied that the subject still has thoughts about
killing himself or still has a desire or intention to kill himself should the observer record "True" for Item 58, "Expresses thoughts about killing himself." or Item 59, "Expresses a desire or intention to kill himself."

On the other hand Item 60, "Reports that he deliberately does himself physical harm short of suicide." should be recorded as 'True' if the subject describes this as a current attitude or disposition which has resulted in physical harm in the past and which is likely to occur again in the future. The subject may respond to a question by describing himself in general terms or by giving examples of the corresponding behavior. For example, Item 21, "Mentions that he worries a lot or that he cannot stop worrying." should be recorded as 'True' if the subject actually describes himself this way, or, if the subject, though not describing himself as a worrier reports many instances of worrying behavior. Similarly, Item 30, "Describes himself as rash, impetuous or impulsive," is answered 'True' if the subject characterizes himself this way, but would also be recorded as 'True' if the subject merely gives instances of this kind of behavior as typical of himself.

With reference to depression, Item 42, "Reports that he has periods of depression." should be recorded as 'True' only if the subject reports recurrent periods of depression, but not if he describes himself as depressed by some particular experience or loss. In the area of thought problems, Item 63, "Reports that he has weird or bizarre thoughts." should be recorded as 'True' if the subject qualifies his thoughts by these terms or similar terms, but also if he describes thoughts which are so patently absurd that the interviewer can recognize them as weird or bizarre.
Item 4 and item 5 require reference to social norms for an appropriate judgment. Item 4, "Hair is unkempt, tangled or matted." should be recorded as 'True' only if the hair is completely disheveled or dirty, but not if it is merely shaggy or cut in a Bohemian style. Item 5, "Clothes are dirty, in disarray or bizarre." should only be rated 'True' for instances of grossly incongruous combinations of clothing, dirty clothing not justified by work conditions, or transvestism.

For some items, even though it would be possible to secure corroboration, the interviewer should record his judgment on the basis of the evidence supplied by the subject. For example, Item 46, "Reports a motor or sensory dysfunction not confirmed by medical evidence," and Item 47, "Insists that an organ or organ system is diseased in spite of negative medical findings." refer to complaints by the subject about dysfunction or disease which are not supported by medical findings. The interviewer should record these items as 'True' if the subject reports that his complaint has been rejected by medical authority or if he reports psychiatric referral as an ultimate consequence of a physical complaint. For Item 49, "Says that a part of his body has inexplicably changed in size or shape." to be recorded 'True,' the subject has to make it clear that this change is mysterious to him and is not a result of a physiological process.

In certain cases two or more items taken together reflect the dimension of intensity. For example Item 106, "Mentions no plans for the future," together with Item 107, "Expresses a negative attitude toward his future accomplishments or attainments," provide a range of intensity for evaluating
attitude toward the future. Only if the subject expresses complete absence of any planning for the future should Item 106 be rated "True!" If he merely expresses a negative attitude, Item 107 should be rated "True!"

A few items refer to behavior which is only pathological if it occurs with some frequency during the interview. For example, Item 122, "Keeps talking about the same abstract topic (religion, politics, morals, etc.)." is True if the subject persistently reverts to the same abstract topic. Moreover, the reference must be abstract in order to qualify. Thus a subject who merely makes frequent allusions to his concern with religion as a personal experience would not be recorded as expressing the behavior. Item 147, "Repeatedly drums on table or chair-arm with fingers or taps floor with foot, etc." and Item 163, "Repeatedly laughs or giggles in a foolish way." similarly should not be recorded as "True" unless the corresponding behavior occurs over and over again. The observer need not count the number of occasions but the behavior should occur with high frequency so that there is no question in his mind about its persistence.

Ambivalence should be distinguished from inconsistency. Thus Item 118, "Contradicts himself in his account of conditions or events." should not be reported as "True" merely because the subject expresses incompatible feelings toward some condition or event, but it should be recorded as "True" if his account is grossly inconsistent so that he has provided two competing explanations for either his behavior or his circumstances.

Inappropriate emotional response as reflected in Item 130, "Gives or reports incongruous emotional response (e.g. laughs or scoffs at occasion
of death or disaster.)" should be recorded as "True" only if the behavior is altogether out-of-keeping with the social implications of the event or condition. It should not be recorded as "True" merely because the subject laughs in embarrassment or laughs hysterically, or smiles in recollection at his own discomfiture on some previous occasion, or even smiles at the recollection of his anger on some previous occasion.

Three components must be identified for Item 64, "Reports that he is bothered by the recurrence of certain thoughts which seem senseless to him," to be recorded as "True," the subject must refer to recurrent thoughts, they must seem senseless to him, and he must be bothered by them. If he is merely bothered by the recurrence of certain thoughts, but those thoughts are not senseless, then this item should not be recorded as "True," but Item 62, "Reports that he broods over certain unpleasant thoughts or feelings," should be recorded as "True" instead. On the other hand, if the subject reports the recurrence of senseless thoughts but disclaims being bothered by them, then this is evidence for Item 63, "Reports that he has weird or bizarre thoughts." but not for Item 64.

The area of interests is covered by a series of questions which seek to evoke from the subject some expression of what he likes to do on his own. If the subject has mentioned nothing that interests him or that he enjoys doing, either in response to these questions or at any other point in the interview, then Items 103 and 104 should be recorded as "True." In the same way when the subject is asked about plans for the future, if he fails to mention any plans, no matter how general, either in response to the question or at
any other point in the interview, the Item 106 should be recorded as 'True'.

Subjects vary in the amount of verbal output they display. Some subjects will speak extensively in response to each question and may even have to be interrupted by the interviewer in order that he may continue the interview. Other subjects are inclined to be laconic. They may answer rather briefly but to the point. However, they may not elaborate their answers beyond the minimum response adequate to answer the questions. The observer however, is not expected to distinguish between these two kinds of subjects. However, if the subject is so resistant that during the whole course of the interview, he never does more than respond with single words or an occasional brief phrase, only then should Item 113 be recorded as 'True'.

Scoring

A total score is obtained by counting the maladaptive responses. Total scores may be used to compare subjects with each other and to evaluate changes after treatment. The inventory can also be scored on the subtest areas of which it is composed so as to provide a clinical profile.

Reliability

The reliability of the SCI has been tested on a series of successive admissions to a research hospital. Simultaneous independent observations were obtained by a team of four psychologists on 28 patients. In order to obtain multiple simultaneous observations, a special interview room with one-way window and provision for amplification of sound was used.

The interviewer and each observer independently filled in the inventory
as the interview progressed. Reliability was evaluated by a two-way analysis of variance. Table 1 shows the results of this analysis. The intraclass $R$ of .77 indicates that less than 25% of the variance of a score is attributable to residual error variance.

Table 1

Reliability of the STRUCTURED CLINICAL INTERVIEW in a Research Hospital (1961)

<table>
<thead>
<tr>
<th>Source</th>
<th>MS</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>95.06</td>
<td>27</td>
</tr>
<tr>
<td>Observers</td>
<td>43.39</td>
<td>3</td>
</tr>
<tr>
<td>Residual</td>
<td>6.72</td>
<td>81</td>
</tr>
</tbody>
</table>

\[
s^2_{obs} = \frac{MS_{obs} - MS_{res}}{N} = 1.31
\]

\[
R_{intraclass} = \frac{MS_{pt} - MS_{res}}{MS_{pt} + 3 MS_{res}} = .77
\]

Table 2 indicates the results of reliability analyses at two state hospitals in which chronic schizophrenic patients were interviewed. Generally correlations among well-trained interviewers tend to center around a mean value in the .80's.
Table 2

Reliability Analyses
Intraclass Correlations for Observer Teams
on the STRUCTURED CLINICAL INTERVIEW
(1962-1963)

<table>
<thead>
<tr>
<th>Institution</th>
<th>No. of Subjects</th>
<th>No. of Observers</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>M₁</td>
<td>37</td>
<td>2</td>
<td>.92</td>
</tr>
<tr>
<td>M₂</td>
<td>10</td>
<td>2</td>
<td>.64</td>
</tr>
<tr>
<td>M₃</td>
<td>25</td>
<td>3</td>
<td>.89</td>
</tr>
<tr>
<td>M₄</td>
<td>37</td>
<td>2</td>
<td>.80</td>
</tr>
<tr>
<td>B₁</td>
<td>26</td>
<td>2</td>
<td>.87</td>
</tr>
<tr>
<td>B₂</td>
<td>83</td>
<td>2</td>
<td>.83</td>
</tr>
</tbody>
</table>

Internal Consistency

Point biserial correlations were computed between each item and total score on a sample of 75 successive admissions to a state research hospital during 1961. Although this sample reflects a restricted range of pathology because of the admission policy of the institution at that time, 98 items showed sufficient frequency of occurrence (at least six subjects) to warrant interpretation of the point biserial. Of these, 46 items had 95% confidence limits which excluded zero. In general, the evidence of internal consistency justifies use of the instrument as a measure of global pathology.

Validity

Evidence for the predictive validity of behavioral indices can only come from longitudinal studies of patients' subsequent hospital experiences.
currently under way. But since significant periods of follow-up are only obtained after an interval of years, other criteria have been used as tentative indicators of the concurrent validity of the scores on the SCI.

Table 3 displays the correlations between the SCI and the WARD BEHAVIOR INVENTORY. In the first four studies, the SCI was administered to the same patients on whom the WBI was recorded by nurses or attendants. The psychologists who interviewed had no information about the patient other than age and sex, nor knowledge of the information obtained by ward personnel. Despite the differences in settings and time span of observation, the scores of the patients on the two instruments were significantly related. In the fifth study the behavior of the patients was recorded on the inventory after unstructured clinical interviews. Here the correlations were insignificant. This suggests that the structured interview increases agreement among independent assessments of behavior.
Table 3
Concurrent Validity of the
STRUCTURED CLINICAL INTERVIEW (1962-1964)

<table>
<thead>
<tr>
<th>Technique</th>
<th>1 SCI</th>
<th>2 SCI</th>
<th>3 SCI</th>
<th>4 SCI</th>
<th>5 Unstructured Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion</td>
<td>WBI</td>
<td>WBI</td>
<td>WBI</td>
<td>WBI</td>
<td>WBI</td>
</tr>
<tr>
<td>N</td>
<td>16</td>
<td>73</td>
<td>103</td>
<td>103</td>
<td>73</td>
</tr>
<tr>
<td>r</td>
<td>.68</td>
<td>.35</td>
<td>.30</td>
<td>.45</td>
<td>.22</td>
</tr>
<tr>
<td>Confidence Limits*</td>
<td>.28 ≤ ρ ≤ .88</td>
<td>.13 ≤ ρ ≤ .54</td>
<td>.11 ≤ ρ ≤ .47</td>
<td>.28 ≤ ρ ≤ .59</td>
<td>-.01 ≤ ρ ≤ .43</td>
</tr>
</tbody>
</table>