THE QUICK SCREENING INVENTORY FOR SERIOUS EMOTIONAL DISTURBANCE

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Abstract

This paper discusses the need for screening programs to identify seriously emotionally disturbed (SED) students and the development and trial of a screening instrument for identifying probable cases from among possible cases. *The Quick Screening Inventory* is a brief, easy to use instrument that is directly related to the definition of serious emotional disturbance in P.L. 94-142. The QSI was demonstrated to have adequate reliability. In a screening trial conducted in a small school system without SED services, the QSI identified 1.6% of the system's student population as being probable cases of SED. A check of those students identified with the QSI was done using the *Behavior Problem Checklist* (Revised) and 96% of the identified cases were confirmed as probable SED cases. Other results are also discussed along with limitations of the study.

Public Law (P.L.) 94-142 requires that the public schools attempt to identify all handicapped students, including those termed "seriously emotionally disturbed" (SED) [121a128(a)]. Such attempts by the public schools are usually referred to as "child find." SED students are under-served relative to their predicted numbers (Grosnick & Huntz, 1980; Center & Obringer, 1987). While there are any number of possible explanations for this state of affairs (Center & Obringer, 1987; Center & Eden, 1990), one possibility is inadequate child find efforts on the part of school systems.

There is some evidence to support inadequate child find efforts as a partial explanation for under-service. One possible reason that more screening isn't done for SED is the lack of a brief, inexpensive, and "user friendly" screening instrument. The QSI (Quick Screening Inventory) is an attempt to rectify that situation.

The primary purpose of a screening instrument is to identify students who need further assessment or monitoring (Taylor, 1984). The instrument should narrow down the set of all possible cases to a subset of probable cases. The identified subset can then be targeted for closer examination with more intensive, accurate, and expensive methods of evaluation.

During the development of the QSI the authors had several objectives:

1. To develop an instrument with acceptable reliability.
2. To develop an instrument with content validity.
3. To develop an instrument that would identify probable cases.
4. To develop an instrument that was brief.
5. To develop an instrument that was easy for teachers to use.

Methods

Assessment

The first step was to develop an instrument with content validity. The authors decided that the best way of accomplishing this task was to have the content of the instrument directly related to the definition of SED in P.L. 94-142. The first step was to develop functional definitions for the three conditions specified in the P.L. 94-142 definition.

One issue that had to be resolved before the process could proceed was the interpretation of the phrase "adversly affects educational performance." Two major interpretations have been made of this phrase. First, the phrase refers only to a student's academic performance. Second, the phrase refers to a student's overall ability to function in an educational setting. This second interpretation clearly includes academic performance but also includes other types of student performance. The first interpretation was selected for several reasons. First, it seemed that there could be little argument that, at least in part, the phrase includes academic performance. Second, the authors thought that it would result in a "cleaner" set of definitions and result in less confusion about the criteria to be used in responding to the instrument. Finally, the authors thought that the first interpretation was more likely to be accepted by the teachers in the setting where the field trial was to be conducted. Clearly, if one wanted to revise the instrument to make it consistent with the second interpretation that could be done. The definitions used are as follows:

1. "Marked problem" means the student clearly *stands out* in contrast to other students in the class relative to the behavior under consideration.
2. "Long period of time" means the

student has had the problem regularly for at least *six months*.

3. "Adversely affects educational performance" means the student is at least *25% behind* in at least one academic subject. A percentage criterion was decided on over some other type of criterion such as standard deviation because a regular classroom teacher might not have standardized test data on a student but could still make a judgment based on classroom experience with the student.

An instrument with six items was then constructed based on the descriptive characteristics provided for SED in the P.L. 94-142 definition (See Table 1). The instrument requires from one to eight "yes" or "no" responses indicated by a checkmark.

The second step was to determine if the instrument had reliability. Several types of reliability checks were considered. Split-half reliability was rejected because of the small number of items. Inter-rater reliability was rejected because of the difficulty of finding enough two teacher pairs, sufficiently familiar with the same student, to serve as knowledgeable informants. Therefore, test-retest reliability was selected as the best option. Test-retest reliability was determined, using a two week interval, by having several classes of graduate students in regular education courses complete the instrument. Only students who were currently teaching in a regular classroom participated.

During the reliability check,

teachers who answered Question One by checking "No" were instructed to turn-in the instrument without any further responses. Teachers who answered Question One by checking "Yes" were told that if they had more than one student in mind when they checked "Yes" to complete the instrument for the student they considered to have the most serious problem.

Participants were instructed to complete the instrument on one student in order to minimize the amount of class time that would be consumed. When professors were asked to allow the use of students in their classes for the reliability check, they were told that that loss of instructional time would be kept to a minimum. Respondents in the reliability check were told to use the student with the most serious problem because it was thought that this would result in more of the items being responded to and therefore provide more data for the reliability check. Teachers completing the entire instrument were instructed to omit the student identification requested in the last item except for the student's first name. The above process was repeated two weeks later. The name of the student previously evaluated was placed on each teacher's second copy of the QSI to ensure that the same student was evaluated on the second administration. The teachers, however, were instructed to complete the QSI onthe named student as though they were doing so for the first time.

A total of 45 paired instruments resulted from this process. A "Yes" response was assigned a value of one and a "No" response was assigned a

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Table 1
An Illustration of the contents of the Quick Screening Instrument

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1. Do you have a student who, in your estimation, is at least 25% behind in at least one <u>academic</u> subject, for example, the student is in the latter part of the sixth grade and is functioning at early to middle fifth grade level or lower in math?

    a. ___ YES   or   ___ NO

    If you have answered "No", stop and turn in the survey.

    b. ___ YES   or   ___ NO

Before continuing on to question two, please note the following definitions to be used in answering question two through six.
"Marked problem" means the student clearly <u>stands out</u> in contrast to other students in the class relative to the behavior under consideration.
"Long period of time" means the student has had the problem regularly for at least <u>six</u> months.

2. Does this student have <u>marked</u> problems relative to inappropriate behavior under normal conditions, for example, uncooperative, quarrelsome, jealous, aggressive, and so forth, which have been present over a <u>long</u> period of time?

    a. ___ YES   or   ___ NO

Please continue on to question three.

3. Does this student have <u>marked</u> problems relative to inappropriate behavior under normal conditions, for example disruptive, steals, hyperactive, destructive, and so forth, which have been present over a <u>long</u> period of time?

    a. ___ YES   or   ___ NO

Please continue on to question four.

4. Does this student have <u>marked</u> problems relative to inappropriate feelings under normal conditions, for example, feelings easily hurt, easily angered, negativism, suspicious, and so forth, which have been present over a <u>long</u> period of time?

    a. ___ YES   or   ___ NO

Please continue on to question five.

5. Does this student have <u>marked</u> problems relative to a general mood of unhappiness or depression, for example, never has "fun", shy and socially withdrawn, feels inferior, cries over insignificant things and so forth, which have been present over a <u>long</u> period of time?

    a. ___ YES   or   ___ NO

Please continue on to question six.

6. Does this student have <u>marked</u> problems relative to physical complaints or fears associated with personal or school problems, for example, anxious, unable to relax, overly cautious, frequent complaints of headache, stomachache, and so forth, which have been present over a <u>long</u> period of time?

    a. ___ YES   or   ___ NO

Did you answer "Yes" for this student on <u>any</u> of the questions 2 through 6?

    b. ___ YES   or   ___ NO

If you have answered "No", stop and turn in the survey.

If you answered "Yes", please fill in the information below.

    Student's Name   _____
    Student' Sex   _____
    Student's Grade   _____
    Student's School   _____

    If you have other students who you feel would fit this survey, please obtain additional forms from the office and complete and turn them in. Thank You.

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value of zero. A total score was then computed for each instrument by summing the scores. A Pearson product-moment correlation was computed on the paired scores. This resulted in a Pearson correlation coefficient of $r = .96$. Test-retest reliability was also computed for each item individually. Item-by-item reliability was as follows:

1a.	$r = .86$.
1b.	$r = .83$.
2.	$r = .83$.
3.	$r = .78$.
4.	$r = .69$.
5.	$r = .95$.
6a.	$r = .79$.
6b.	$r = .54$.

The rather low correlation obtained for item 6b was apparently due to a number of teachers failing to consistently respond to the second part of the last question. This does not represent a serious problem. Item 6b is not related to student characteristics but is a question for the convenience of the user of the QSI. The answer to this question, when it is left unanswered, is easily obtained by simply inspecting the responses made to items 2 through 5. The obtained reliability scores were judged as more than adequate for the instrument's purpose, i.e., initial screening for probable cases.

The teachers completing the instrument were also asked to respond to a two-item questionnaire with a simple "Yes" or "No" response on whether, in their judgment, the instrument was (1) brief and (2) easy to use. Approximately 98% of the teachers judged the instrument to be brief and

approximately 91% judged the instrument easy to use.

Procedures

The next step was to try the instrument as a screening device in a school system. A small, local school system with which the second author was then affiliated was used for the trial. The school system had a total of 107 teachers and 1746 students. Thirty-five percent of the student population was black and 65% was white. There were no identified SED students, nor programs for such students in the school system. While this last statement may strike some readers as unusual, it is typical of school systems in Mississippi which has the lowest service level for SED of any state in the U.S.

The trial was begun in the spring after teachers had had students for a long enough period of time to apply the duration criterion used by the instrument. Each teacher was given one copy of the instrument and told that he or she should complete the instrument as part of a child find procedure and to turn it in to the school office by the end of the week. Teachers were also told that if they needed additional copies of the instrument they were available in the school office. An ample supply of the instrument was left in the school office at each of the four schools in the system.

After the instruments were collected and evaluated, a list of students and the identifying teacher for each was constructed. Each of these teach-

ers was then given a copy of the *Behavior Problem Checklist* (Revised) by Quay and Peterson (1983) and instructed to complete the checklist on the student(s) they had identified on the QSI.

Results

The QSI identified 28 (1.6%) students as probable cases of SED. Of these identified students 12 (43%) were at the elementary level (G1-G4), 9 (32%) were at the middle school level (G5-G8), and 7 (25%) were at the high school level (G9-G12). In the identified group, six (21%) were female and 22 (79%) were male. Sixteen (57%) of the identified students were black and 12 (43%) of the identified students were white. Two (7%) of the identified students were already in special education placements (one each in MR and LD).

The check on the QSI done using the *Behavior Problem Checklist* (Revised) found 27 (96%) of the identified students to have significant problems according to this well known and widely used instrument. Judgments on the BPC-R data were made using the conduct disorder (CD), anxiety-withdrawal (AW), and psychotic behavior (PB) subscales. The socialized aggressive (SA) subscale was not used since this was viewed as equivalent to social maladjustment, an excluded category, in the P.L. 94-142 definition (Center, 1989, 1990). The attention problem (AP) and motor excess (ME) subscales were not used as these were viewed as more closely related to another special education category (learning disabili-

ties).

Two sets of norms from the BPC-R manual were used. The norms based on a normal sample (Table 8) were used. The criterion for retention in the identified group was 1+ S.D. above the mean on at least one of the three subscales employed. Twenty-seven of the 28 identified students met this criterion. The norms based on a clinical sample (Table 5) were also used. The criterion for retention in the identified group was a score equal to or greater than the mean on at least one of the three subscales employed. The same 27 students who met the criterion for Table 8 also met the criterion for Table 5.

Twenty-two (81%) of the 27 identified students who were retained were deviant on two or more of the BPC-R subscales, on at least one set of norms. Overall, 22 (81%) were deviant on the CD subscale. Eighteen (67%) students were deviant on the AW subscale. Fourteen (52%) were deviant on the PB subscale.

Discussion

The results of this study suggest that the QSI met the objectives set-out by the authors. The QSI has adequate reliability for a screening instrument, should have content validity, is brief, and is easy to use. The initial trial with the QSI and the check on its results using the BPC-R, indicated that probable cases identified by the QSI were in fact students that, in all probability, needed further evaluation.

One major short-coming of this

study was an inability to follow-up on the number of students identified by the QSI who were subsequently ruled eligible for SED services. Several factors mitigated against this step being accomplished. First, the first author left the state. Second, the second author took a position with another school system within the state. Finally, and perhaps most important, the likelihood of a student being ruled eligible for SED services in Mississippi, regardless of need, is very small. Mississippi, for all practical purposes, does not serve students in the SED category. This is evident from the extremely low service level to SED students in Mississippi. As pointed-out earlier, Mississippi has the lowest service level of any state in the U.S. It serves approximately .007 of its school-age population as SED, which numerically translates into less than 400 students state-wide. Therefore, even if the logical final step for this study had been conducted, the results would probably have been meaningless.

One question that arises from the results is, why didn't the QSI identify a larger percentage of the school population screened? The prevalence figure for SED is 2-3% and screening instruments tend to over-identify yet only 1.6% were identified by the QSI. In fact, Bower (1981) using the same definition used in developing the QSI found as much as 10% of the population screened as probable cases.

There is no certain answer to this question. One possibility is that the official prevalence figure may be inaccurate, though this is not generally accepted as true (Kauffman, 1985). If one accepts that the mean, national service level is a good estimate of prevalence, then the QSI did over-identify by about 44%. If one accepts the official prevalence figure as correct, the QSI under-identified by between 20% and 47%. A second possibility is that the functional criteria used in the QSI for the three conditions that must be met under the P.L. 94-142 definition (duration, intensity, and adverse effect on academic performance) limited the number of referrals. A third possibility is that because of the lack of SED services in the school system used for the trial screening teachers were more tolerant of deviant behavior than they might otherwise have been. Finally, it is possible that because of the lack of SED services in the school system, the teachers tended to identify only their most severe cases. Some indirect evidence supporting this explanation is the high percentage (52%), of identified students, who were deviant on the PB subscale of the BPC-R.

In conclusion, it must be stated that the only way to answer the above questions would be to conduct a similar screening trial where the problems and limitations in this trial were not present. However, the authors think that the data collected on the QSI in this study indicates that the QSI has a high probability of being a fast, inexpensive, and easy to use screening instrument that could be used without any further study. Clearly, anyone deciding to use this or any other screening instrument should establish evaluation criteria to determine if the instrument is in fact doing adequately the task it was selected to accomplish.

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