

Strengths and Difficulties Questionnaire(SDQ)

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Talk plan

- Brief description of SDQ
- Information on Bangla SDQ
- Methods of administering Bangla SDQ
- Practicum
- Concluding notes

Introduction

- The SDQ is a brief behavioral screening questionnaire for child and adolescent mental health problem
- SDQ is developed, adopted and validated by Goodman et al in 1995

Introduction

- The SDQ asks about 25 attributes, some positive and some negative
- The items, which were selected on the basis of contemporary diagnostic criteria as well as factor analyses

Introduction

- These 25 items are divided between 5 scales:
 - 1) Emotional symptoms (5 items)
 - 2) Conduct problems (5 items)
 - 3) Hyperactivity/inattention (5 items)
 - 4) Peer relationship problems (5 items)
 - 5) Prosocial behaviour (5 items)

Introduction

- 1) to 4) added together to generate a total difficulties score (based on 20 items)
- Total difficulties score ranged from 0-40
- 5) provides information on child strengths in term of social skills

Versions of SDQ

According to informant the SDQ has

- **Parents Version:** for 2-4 years and 4-17 years
- **Teacher Version:** for 2-4 years and 4-17 years
- **Self Version:** for 11 to 17 years

The age range can be extended to 18+ years

Versions of SDQ

According to extent SDQ has

- **Single Version:** One sided with 25 items only
- **Full/Extended version:** Both sided with 25 items + the impact of any psychiatric symptoms in terms of resultant distress, social impairment or burden for others

Time required to fill up SDQ

- The SDQ can be completed in about **five minutes** by parents or teachers of children aged 2-4 and 4-17 for one sided and take some more time for both sided
- Self version can be completed in nearly within same time frame

Psychometric properties of SDQ

- The SDQ has been shown to be of acceptable reliability and validity, performing at least as well as the lengthier and longer-established Rutter Questionnaires and Child Behavior Checklist (CBCL)
- It is shorter and more effective in measuring child psychopathology including impact
- More acceptable than any other screening tools as reported by the users, clinicians, other professionals and researchers

Uses of the SDQ

- **Clinical assessment.** Many child and adolescent mental health clinics now use the SDQ as part of the initial assessment, getting parents, teachers and young people over the age of 11 to complete questionnaires prior to the first clinical assessment
- **Evaluating outcome.** "Before" and "after" SDQs can be used to audit everyday practice (e.g. in clinics or special schools) and to evaluate specific interventions (e.g. parenting groups)

Uses of the SDQ

- **Epidemiology.** The SDQ's emphasis on strengths as well as difficulties makes it particularly acceptable to community samples. It has been widely used in large epidemiological studies. The SDQ is well adapted for studies of the general population since it is a dimensional measure across its full range, with each one-point increase corresponding to an increased rate of disorder. Mean SDQ scores can be used to generate prevalence estimates

Uses of the SDQ

- **Research.** The SDQ is being used as a research tool throughout the world - in developmental, genetic, social, clinical and educational studies.
- **Screening.** In community samples, multi-informant SDQs can predict the presence of a psychiatric disorder with good specificity and moderate sensitivity

Scoring the SDQ

- **The fast SDQ scoring site** for online scoring and report generation. **scoring website is SDQscore.org**
- **Hand Scoring**
 - Instructions to be followed for scoring by hand **SDQs for 4-17 year olds**, as completed by parents, teachers or youths. These instructions also cover scoring the SDQ for those aged **18+**.
 - Instructions to be followed for scoring by hand **SDQs for 2-4 year olds**, as completed by parents or teachers.

Scoring the SDQ

- **Black-and-white transparent overlays for hand scoring** the English versions of the SDQ. There is one overlay for each of the five subscales (emotional, conduct, hyperactivity, peer and prosocial). You can print the five pages onto paper and then photocopy onto transparency films. To calculate total score, add the emotion, conduct, hyperactivity and peer scores - but don't include the prosocial score

Scoring the SDQ

- A **record sheet** in English for hand-scored questionnaires. Record sheets in many other languages are also available/preparable
- **Scoring syntax using SPSS**
- **Scoring syntax using SAS**
- **Scoring syntax using Stata**
- **Scoring syntax using R**
- **Computerised algorithm** for predicting disorders from multi-informant SDQ scores
- **An "added value" score for specialist services**

Translation and validation of SDQ

- SDQ has been translated and validated in more than 50 languages
- The web site at www.sdqinfo.com provides more information on the SDQ plus downloadable versions of the questionnaires in many languages

Bangla SDQ

- The all versions of the SDQ were translated and validated into Bangla by Mullick and Goodman in 2000
- The Bangla version of all form of SDQ have similar psychometric properties that is tested through a series of studies

Bangla SDQ

- Sensitivity and specificity for SDQs were tested using *Receiver Operating Characteristic (ROC)* curves, employing the area under the curve (AUC) as the index of discriminative ability
- All being scored in the standard manner

Psychometric properties of Bangla SDQ

1. Test-Retest reliability

Test-retest correlations and kappa values of scores of Parent, Teachers and Self versions were found highly significant ($p < 0.01$)

2. Predictive validity

Multi-informant prediction to rater-assigned DAWBA DSM/ICD diagnoses in non-clinical sample (urban, rural, slum; $N=300$) corresponds to an odds ratio of 52.5 (95% CI 20.6, 134.1), $p=.000$. that was highly significant

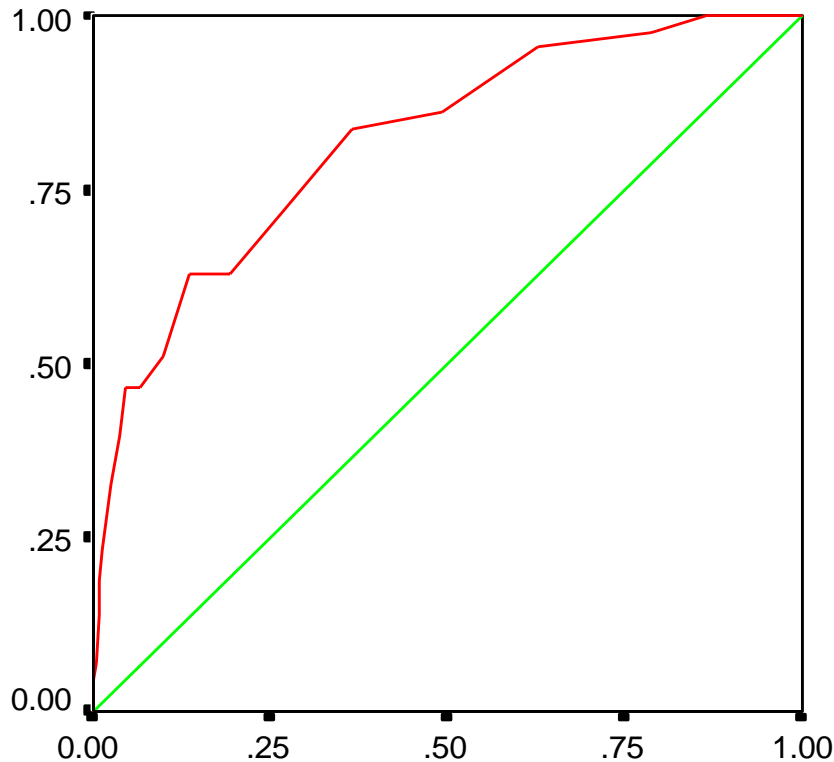
3. Criterion validity

In terms of traditional screening parameters:

Sensitivity=63% (27/43) Specificity=97% (249/257)

Criterion Validity of Bangla SDQ

ROC Curve



1 - Specificity

Diagonal segments are produced by ties.

Sensitivity 65 %

Specificity 95 %

Scoring the Bangla SDQ

All types scoring systems of SDQ are applicable for Bangla SDQ

- **The fast SDQ scoring site** by giving input in English for online scoring and report generation. scoring website is SDQscore.org
- **Hand Scoring**
 - for scoring by hand **SDQs for 2-4 year year olds**, as completed by parents, teachers or youths. Cut-offs for the parent vision- 15/16
 - for scoring by hand **SDQs for 4-17(18+) olds**, as completed by parents or teachers. Cut-offs for the parent vision- 16/17

Scoring the Bangla SDQ

- Black-and-white transparent overlays for hand scoring
- Scoring syntax using SPSS
- Computerised algorithm for predicting disorders from multi-informant SDQ scores
- Paper and pencil algorithm for predicting disorders from multi-informant SDQ scores

Bangla SDQ: Predictive algorithm

PARENT SDQ -----> Emotional 0 1 2 3 4 5 6 7 8 9 10 Conduct 0 1 2 3 4 5 6 7 8 9 10 Hyperactivity 0 1 2 3 4 5 6 7 8 9 10 Impact 0 1 2 3 4 5 6 7 8 9 10	If Emotional ≥ 7 AND Impact ≥ 2 Then tick here <input type="checkbox"/>	If Conduct ≥ 6 AND Impact ≥ 2 Then tick here <input type="checkbox"/>	If Hyperactivity ≥ 8 AND Impact ≥ 2 Then tick here <input type="checkbox"/>
TEACHER SDQ -----> Emotional 0 1 2 3 4 5 6 7 8 9 10 Conduct 0 1 2 3 4 5 6 7 8 9 10 Hyperactivity 0 1 2 3 4 5 6 7 8 9 10 Impact 0 1 2 3 4 5 6 7 8 9 10	If Emotional ≥ 6 AND Impact ≥ 2 Then tick here <input type="checkbox"/>	If Conduct ≥ 6 AND Impact ≥ 2 Then tick here <input type="checkbox"/>	If Hyperactivity ≥ 8 AND Impact ≥ 2 Then tick here <input type="checkbox"/>
SELF SDQ -----> Emotional 0 1 2 3 4 5 6 7 8 9 10 Conduct 0 1 2 3 4 5 6 7 8 9 10 Hyperactivity 0 1 2 3 4 5 6 7 8 9 10 Impact 0 1 2 3 4 5 6 7 8 9 10	If Emotional ≥ 8 AND Impact ≥ 2 Then tick here <input type="checkbox"/>	If Conduct ≥ 6 AND Impact ≥ 2 Then tick here <input type="checkbox"/>	If Hyperactivity ≥ 7 AND Impact ≥ 2 Then tick here <input type="checkbox"/>
	If ≥ 1 of the above are ticked then: SUSPECT EMOTIONAL DISORDER Tick here <input type="checkbox"/>	If ≥ 1 of the above are ticked then: SUSPECT CONDUCT DISORDER Tick here <input type="checkbox"/>	If ≥ 1 of the above are ticked then: SUSPECT HYPERACTIVITY DISORDER Tick here <input type="checkbox"/>
If any of these specific disorder are ticked then SUSPECT PSYCHIATRIC DISORDER Tick here <input type="checkbox"/>			

Bangla Parents SDQ: Predictive algorithm

<p>PARENT SDQ -----></p> <p>Emotional 0 1 2 3 4 5 6 7 8 9 10 Conduct 0 1 2 3 4 5 6 7 8 9 10 Hyperactivity 0 1 2 3 4 5 6 7 8 9 10 Impact 0 1 2 3 4 5 6 7 8 9 10</p>	<p>If Emotional ≥ 7 AND Impact ≥ 2 Then tick here <input type="checkbox"/></p>	<p>If Conduct ≥ 6 AND Impact ≥ 2 Then tick here <input type="checkbox"/></p>	<p>If Hyperactivity ≥ 8 AND Impact ≥ 2 Then tick here <input type="checkbox"/></p>
	<p>If the above are ticked then: SUSPECT EMOTIONAL DISORDER Tick here <input type="checkbox"/></p>	<p>If the above are ticked then: SUSPECT CONDUCT DISORDER Tick here <input type="checkbox"/></p>	<p>If the above are ticked then: SUSPECT HYPERACTIVITY DISORDER Tick here <input type="checkbox"/></p>
	<p>If any of these specific disorder are ticked then SUSPECT PSYCHIATRIC DISORDER Tick here <input type="checkbox"/></p>		

Bangla SDQ in the Present Study

- In the present study, only Parent Version of Full Bangla SDQ(P-SDQ) will be administered for all selected subjects (age range 2-4 & 4-18 years)

Bangla SDQ in the Present Study

Method

- Brief introduction, explanation and clear instruction of P-SDQ will be given to the either parent of the subject in an understandable way

Bangla SDQ in the Present Study

Method

- Parent will be requested to fill it up
- Those who will not be able to read, the SDQ questionnaire will be read out to them and their answers will be recorded accordingly
- Filled up P-SDQ will be checked for all answers and collected
- Record the ID coding

Bangla SDQ in the Present Study

- The data of Parent version of the Bangla SDQ will be entered in the statistical package/Software
- Scoring analysis will divide the sample into screen +ve and screen –ve for generating predictive prevalence
- Among the screening +ve cases, prevalence of broad categories of disorders will be generated by scale scores

Bangla SDQ in the Present Study

- In the 2nd stage, all the +ve cases and proportionate number of –ve cases will be mixed up for diagnostic interview

Conclusions

- SDQ exists in several versions to meet the needs of researchers, clinicians and educationalists
- It is widely used throughout the Globe due to its acceptability, credibility and suitability

Let's start today, thank you all

