Using the Strengths and Difficulties Questionnaire as a screening tool for psychopathology in a sample of Singaporean children

Loh Pek Ru, Danielle Seah, & Dr John Wong Chee Meng.

REACH (WEST), Department of Psychological Medicine, National University Hospital, Singapore.

Contact: danielle_le_seah@nuhs.edu.sg

Introduction

The Strengths and Difficulties Questionnaire (SDQ) is a measure for predicting psychopathology in children and adolescents (Goodman, Ford et al., 2000). A significant association between the SDQ scores and the International Classification of Disease-version 10 (ICD-10) diagnoses has also been reported (Becker et al., 2004). The SDQ has been adopted in many countries outside of its country of origin. Britain. It has been used in research and clinical assessment of child psychopathology. Satisfactory psychometric properties within the European populations have been reported (Rothenberger & Woerner, 2004).

To date, the SDQ has been translated into 40 languages. However, the cross-cultural validity of the SDQ in non-European countries is limited. Psychopathology is defined by presence of abnormal behaviour, and perception of behaviour varies across cultures (Kleinman, 1978). Cross-cultural validity of any psychological measure is therefore vital. The current study examines the clinical utility and predictive values of the SDQ in a sample of Singaporean students.

Aims

To determine the decision agreement, sensitivity, specificity, positive and negative predictive values of the teacher-rated and parent-rated SDQ.

Method

Participants

Participants consisted of 103 students referred to the REACH (Response Early Intervention and Assessment in Community mental Health) West program for mental health concerns. The sample has a racial mix of Malays (14.5%), Chinese (78.6%), Indians (4.9%) and Others (1.9%). Participants consisted of 63.1% males and 36.9% females, with ages ranging from 6 to 18 years old (see Table 1).

<table>
<thead>
<tr>
<th>Age</th>
<th>SDQ Normal</th>
<th>SDQ Abnormal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-7 years</td>
<td>19</td>
<td>15</td>
<td>34</td>
</tr>
<tr>
<td>8-9 years</td>
<td>32</td>
<td>15</td>
<td>47</td>
</tr>
<tr>
<td>10-11 years</td>
<td>30</td>
<td>25</td>
<td>55</td>
</tr>
<tr>
<td>12-13 years</td>
<td>27</td>
<td>12</td>
<td>39</td>
</tr>
<tr>
<td>14-15 years</td>
<td>20</td>
<td>15</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>87</td>
<td>190</td>
</tr>
</tbody>
</table>

Conclusions

This study found the case agreement between teachers’ and parents’ SDQ rating to be a moderate 61%. The differences in the sensitivity and specificity between teachers and parents suggest that teachers are better at identifying and reporting child psychopathology. This may be due to the fact that they have a larger pool of children in the class for comparison of behaviour. Moreover, the different levels of expectations by teachers and parents, levels of permissiveness and tolerance concerning behavioural features may play a part in their ability to accurately report symptoms.

The sensitivity values of 68% (teacher-rated) and 50% (parent-rated) obtained in this study were much higher than that reported by Goodman (1997), who obtained 29.8% for parent-rated SDQ and 34.5% for teacher-rated SDQ in his sample. Together with the low to moderate predictive values, our results suggest that the clinical usefulness of the SDQ is still below the 80% acceptable level as recommended by Portney and Watkins (2000). This can be, in part, due to the fact that the 25 core items in the SDQ do not explicitly cover the monosymptomatic disorders and the more specific child psychiatric symptomatology such as tic disorders, eating disorders and enuresis (Rothenberger & Woerner, 2004).

Overall, despite having a sensitivity level below the recommended value for an effective screening tool, the SDQ shows higher clinical utility when reported by teachers compared to parents’ report in Singapore.

References


