The Strengths and Difficulties Questionnaire among Finnish school-aged children and adolescents

Abstract The emotional and behavioural problems of 7- to 15-year-old Finnish children and adolescents (n = 735) were assessed in a community population by a brief screening instrument, the Strengths and Difficulties Questionnaire (SDQ). The parent-, teacher- and self-reports of the SDQ were obtained. The results show that for the total scores, the inter-rater agreement between the pairs of reports was 0.38–0.44. The internal consistency in all three questionnaires was 0.71. Functioning above the 90th percentile of the SDQ total difficulties scores in parent-, teacher- and self-reports was strongly associated with help-seeking variables and problematic behaviour according to parents. The correlation of the parental SDQ total scores and the Child Behaviour Checklist total scores was 0.75 and the correlation of the self-report SDQ total scores with the Youth Self Report total scores was 0.71. The differences in sex, grade and informants of the SDQ total difficulties scores are reported. The study gives further evidence of the usefulness of the SDQ as a promising screening instrument for epidemiological research and clinical purposes.

Key words The Strengths and Difficulties Questionnaire – screening – pathology – child and adolescent psychiatry

Introduction

In psychological and psychiatric research and clinical work with children and adolescents there is a need for validated instruments to screen their emotional and behavioural problems. The Strengths and Difficulties Questionnaire (SDQ) is a brief behavioural screening instrument for these purposes developed by Goodman (10–13). This paper describes the use of the SDQ in the community study of Finnish school-aged children and adolescents. Using the same assessment instruments is valuable when repeating and comparing different studies and also in clinical communication across various countries (6, 24).

The Rutter questionnaires for screening children’s emotional and behavioural problems were developed in the 1960s. Since then they have been widely used and their reliability and validity have been well documented (8, 19, 20). However, many areas of interest in child psychology and psychiatry today are not well covered by them. Furthermore, all items on the Rutter questionnaires are about negative traits. Goodman (9) started by trying to expand the Rutter questionnaires with items about children’s strengths before generating a new questionnaire, the SDQ (10).

While the Rutter questionnaires can be completed only by parents and teachers, different versions for different informants, including a self-report version, are available in a more recent set of questionnaires developed by Achenbach. The Child Behavior Checklist (CBCL) is a standardised measure of child behavioural problems for parents, the Teachers’ Report Form (TRF) for teachers and the Youth Self Report (YSR) for the children and adolescents themselves (1–3). They are among the most
commonly used epidemiological instruments in present
day research of children’s and adolescents’ emotional and
behavioural problems. The CBCL and the YSR are
designed to collect data on a wide variety of behaviours
that are of clinical concern. Although the CBCL is
substantially longer and therefore more time consuming
to complete than the Rutter questionnaires, it also has its
advantages, e.g. versions for different informants. The
validity and reliability of the CBCL and the YSR are well
documented internationally, in the USA (1, 3), the
Netherlands (27) and Finland (7).

The Strengths and Difficulties Questionnaire (SDQ) is
a brief behavioural screening instrument containing 25
attributes, which concern both positive and negative
behavioural traits. As Goodman (10, 11) pointed out, the
design of the SDQ has the following advantages: it fits
easily on one page; it is applicable to children and
adolescents ranging from 4 to 16 years; the same version
can be completed by parents and teachers; a similar
version is available for self-report; both strengths and
difficulties are well represented; and there is an equal
number of items on each relevant dimension, namely,
conduct problems, emotional symptoms, hyperactivity,
peer relationships and prosocial behaviour.

The reliability and validity of the SDQ have been
investigated since 1997 in the United Kingdom by
Goodman and his colleagues (10–13), but to our
knowledge, only a few studies outside the UK have been
published. In Sweden, Smedje et al. (22) found that
the psychometric properties of the parent-report SDQ
were adequate and confirmed the postulated factor
structure. Furthermore, the results of the German study
(14) showed that the parent- and self-rated SDQ and
CBCL/YSR were highly correlated and equally able to
distinguish between community and clinic samples.

The aim of the present study was to describe the use
of the SDQ in a Finnish community population of 7- to
16-year-old school-aged children and adolescents. Our
aim was to report the age and gender differences and the
cross-informant agreement between parent-, teacher-
and self-report versions of the SDQ. The aim was also
to shed some light on whether parent-, teacher- and self-
report total difficulties scores of the SDQ differentiate
children with problematic behaviour. In addition, we
conducted another study with a different population of
adolescents to determine correlations between the
CBCL, the YSR and the SDQ total scores and subscores.

Material and methods

Subjects

Study 1 was conducted during April 1998. It included all
the children and adolescents who were living in two
suburban/rural municipalities, Laitila and Pyhäranta
(total population 11 200) in south-west Finland and who
were attending 1st, 3rd and 5th grades of primary school
and 7th and 9th grades of secondary school. Only
severely mentally retarded children were excluded from
the study.

The parental version of the SDQ was sent to be
completed at home for the whole sample (1, 3, 5, 7 and
9th graders; n = 735). The SDQ self-report was filled in
by the 3rd, 5th, 7th and 9th graders (n = 601) in the
classroom. The SDQ teacher-report was filled in by the
teachers of the children attending 1st, 3rd and 5th grades
(n = 418). The teachers of the secondary school were
asked to take part in the study but they refused because
they thought they were not well enough informed about
the children’s behaviour to fill in the questionnaires.

The parents of the children in primary and secondary
school filled in the SDQ. Of the parent-report SDQ, 96%
were completed (703/735) and included in the
statistical analysis. Of the children and adolescents, 89%
(534/601) had permission from their parents to partici-
pate in the study and 99% of these (528/534) completed
the self-report appropriately. The teachers of one
primary school with 33 pupils refused to participate in
the study and nine more children did not have permis-
sion to participate, but all the other teacher-reports
(376) at the primary schools were completed and
included in the statistical analysis.

The mean age of the children in the 1st grade was 7.8
years (sd 0.4), in the 3rd grade 9.9 years (sd 0.3), in the
5th grade 11.9 years (sd 0.4), in the 7th grade 13.8 years
(sd 0.3) and in the 9th grade 15.8 years (sd 0.4). Of the
children, 48% were boys and 52% girls. Boys and girls
were evenly distributed across the grades and the two
municipalities.

Study 2 was conducted in November 1998. It
included all the pupils who were in the 9th grade in
Laitila and Pyhäranta. The adolescents completed both
the SDQ self-rated version and the YSR problem items
anonymously during a school lesson. The response rate
was 94% (129/137). Eight questionnaires had to be
excluded because the pupils were absent on the relevant
days or the questionnaires were inappropriately com-
pleted. The SDQ informant-rated version and the CBCL
problem items were sent to all parents of adolescents
attending the 9th grade. The parents also completed the
questionnaires anonymously. Of the parents, 59%
(81/137) returned both questionnaires appropriately
completed.

Measures

The Strengths and Difficulties Questionnaire (10, 12)
includes 25 items scored 0 for “not true”, 1 for
“somewhat true” and 2 for “certainly true”. Five items
are worded positively and scored in the opposite