

Strengths and Difficulties Questionnaire (SDQ)

25-item parent/educator report version for 4–17-year-olds

The Strengths and Difficulties Questionnaire (SDQ) is a 25-item measure designed to assess behaviours, emotions and relationships over the last six months in children and young people aged 4–17 years. This original version of the measure is designed for parents or educators to complete, and includes five subscales aimed at assessing conduct problems, emotional symptoms, hyperactivity, peer problems and prosocial behaviour.

	Internal consistency		Test-retest reliability	Validity	Sensitivity to change
Psychometric features	✓ (Scale)	✓ (Subscale)	✓	✓	✓

	Brevity	Availability	Ease of Scoring	Used in the UK
Implementation features	✓	✓	✓	✓

*Please note that our assessment of this measure is based solely on the English version of the SDQ for parents or teachers of 4–17-year-olds. The other versions of this measure were not assessed and therefore it should not be assumed that they would receive the same rating.

What is this document?

This assessment of the Strengths and Difficulties Questionnaire (SDQ) has been produced by the Early Intervention Foundation (EIF) as part of guidance on selecting measures relating to parental conflict and its impact on children. To read the full guidance report and download assessments of other measures, visit: <https://www.eif.org.uk/resource/measuring-parental-conflict-and-its-impact-on-child-outcomes>



- The SDQ is comprised of five subscales, but the internal consistency results for the peer relationship subscale has been found weaker when compared to that of the combined subscales. Consequently, we recommend using the Internalising, Externalising and Total Difficulties scores rather than the individual subscales. For more information, see the 'subscales' section below.
- The developers suggest that the standard SDQ, which asks parents or educators to reflect on a child's behaviour in the last six months, should not be used more often than every six months, or there will be overlapping reference periods. To evaluate an intervention shorter than six months, it is therefore best to start with the standard version of the SDQ, and then use a follow-up version, which asks parents to reflect on their child's behavior in the last month. The follow-up version is available at: [https://www.sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz\(UK\)](https://www.sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz(UK))

About the measure

 Author(s)/ developer(s) Goodman, R.	 Publication year for the original version of the measure 1997	 Type of measure Parent or educator report of child.
--	--	---

Versions available

There are four other versions of this measure available, including: a version for parents or educators of 2–4-year-olds, a self-rated version for 11–17-year-olds, another self-rated version for youth aged 18 and over, and an informant report version for youth of that same age. For each of these versions there is also an equivalent follow-up version. For more information, please visit <https://www.sdqinfo.org>.

Outcome(s) assessed

This measure has been designed to assess behaviours, emotions and relationships in children and young people. The measure provides both an Internalising and an Externalising score.

Subscales

There are five subscales: conduct problems, emotional symptoms, hyperactivity, peer problems and prosocial behaviour.

According to the developers, a Total Difficulties score can be generated by summing the scores of all scales except the prosocial scale. The developers also propose summing the scores from the conduct and hyperactivity scales to obtain an Externalising score, and adding the scores of the emotional and peer problems scales to produce an Internalising score.

When using a version of the SDQ that includes the ‘impact supplement’, the items on overall distress and impairment can be summed to generate an Impact (or Impairment) Score.

Purpose/primary use

This measure was originally designed to represent strengths and difficulties in children and young people.

Mode of administration

This measure can be completed in person or online.

Example item

‘Considerate of other people’s feelings.’

Target population	<p>This measure was originally developed for children aged 4–16 years.</p> <p>However, in June 2014, the developers changed the age range of the standard SDQ from 4–16 to 4–17 years.</p>
Response format	3-point Likert scale (0 = 'Not True', 1 = 'Somewhat True', 2 = 'Certainly True').
Strengths & limitations	<p>Strengths:</p> <ul style="list-style-type: none"> • The SDQ is a valid and reliable measure which is sensitive to change in short interventions. • The SDQ assesses both externalising and internalising problems. • The SDQ is a short (25-item) measure, which is free to access and easy to score (the SDQ is available at: https://www.sdqinfo.org, with a bespoke scoring website at: https://sdqscore.org/).
Link	https://www.sdqinfo.org
Contact details	youthinmind@gmail.com
Copyright	<p>Please note that the SDQ, whether in English or in another language, is a copyrighted document that is not in the public domain. As such, the SDQ may not be modified in any way (for example, by changing the wording of questions, adding questions, or administering only subsets of questions). This is to ensure that the SDQ is fully comparable across studies and settings. Similarly, to ensure high quality and consistency, unauthorised translations are not permitted. Paper versions may be downloaded from the website and subsequently photocopied without charge by individuals or non-profit organisations, provided they are not charging families.</p> <p>Users are not permitted to create or distribute electronic versions for any purpose without prior authorisation from Youth In Mind. If you are interested in making translations or creating electronic versions, you must first contact youthinmind@gmail.com.</p>
Key reference(s)	<p>Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. <i>Journal of Child Psychology and Psychiatry</i>, 38(5), 581–586. https://doi.org/10.1111/j.1469-7610.1997.tb01545.x</p>

Psychometric features in detail

Internal consistency

✓
(Scale)

We found a number of papers (Deighton et al., 2014; Haywood et al., 2014) reporting good internal consistency for the SDQ, with Cronbach's alpha values ranging from 0.63 to 0.85.

Deighton et al. (2014) evaluated the parent/carer version of the SDQ for 4–17-year-olds. The authors reported that internal consistency coefficients were between 0.63–0.85. This review was based on three studies conducted by the developers: (i) one with a sample of 403 children aged 4–16 years (Goodman, 1997), (ii) another with two samples of 11–16-year-olds (one sample comprised of 83 young people in the community and the other of 116 young people attending a mental health clinic) (Goodman, Meltzer, & Bailey, 1998), and a (iii) final study with a sample of 132 children aged 4–7 years (Goodman & Scott, 1999).

Haywood et al. (2014) reported that the SDQ has evidence of internal consistency (with alpha coefficients ranging from 0.79 to 0.80), supporting application with groups of children. The review was based on two studies assessing the measure. One study was conducted with a sample of 63 11–18-year-old participants. We do not have information concerning the second study.

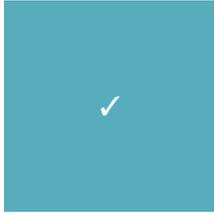
✓
(Sub-scales)

Hessel, He, & Dworkin (2017) reported that the Internalising Score had an alpha coefficient of 0.82, the Externalising Score had an alpha coefficient of 0.83, and the prosocial behaviour subscale had an alpha coefficient of 0.76. This study was conducted in the US with a sample of 158 fathers (mean age = 43.47 years, SD = 7.65) of high school and college students.

Palmieri & Smith (2007) reported that internal consistency was above 0.60 for all the five SDQ subscales (alpha coefficients ranged from 0.62 to 0.82) The authors reported that Cronbach's alpha was 0.88, for the Total Difficulties score. This study was conducted in the US with a sample of 733 grandmothers (mean age = 56.1 years, SD = 8.1) providing full-time care to a grandchild in the absence of that grandchild's parents for at least three months.

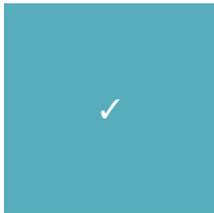
He et al. (2013) reported good internal consistency coefficients for all subscales (alpha coefficients ranging from 0.72 to 0.76), except for the peer relationship scale (alpha coefficient = 0.58). This study was conducted in the US with a sample of 6,483 adolescent-parent pairs (children mean age = 15.9 years (SD 0.1), education levels of parents: 12.3 % less than high school graduation, 29.3% high school graduation, 21.3% some college and 37% college graduation or graduate school).

Mark & Pike (2017) reported that all SDQ subscales had alpha coefficients ranging from 0.74 to 0.80. This study was conducted with a sample of 78 mothers (mean age = 41.01 years (SD 4.92), mean ages of the older siblings and younger siblings were 12.05 years (SD ¼ 1.04) and 9.82 years (SD ¼ 0.89), respectively). The participants were almost exclusively White British (95%).

Test-retest reliability

According to Achenbach et al. (2008), Goodman (1999) reported an intraclass correlation of 0.85 for Total Difficulties score but did not report results for the subscales. The authors did not report the time span between test and retest.

Achenbach et al. (2008) also reported that in Mellor (2004), a sample of Australian children was included in a test-retest analysis if they had completed a second administration of the SDQ two weeks and four to six months after the first administration. The authors reported an ICC value of 0.81 for the whole scale after two weeks, and a value of 0.72 after four to six months.

Validity

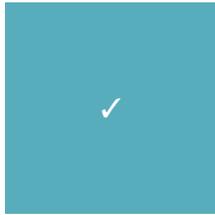
From our review, we found a number of papers (Achenbach et al., 2008; Deighton et al., 2014; Stone et al., 2010; Tsang et al., 2012) reporting good validity for the SDQ subscales. The authors reported Pearson coefficients ranging from 0.59 and 0.87 with the subscales of CBCL, a 113-item parent report measure designed to assess behavioural and emotional problems in children and young people aged 6–18 years.

In their systematic review, Deighton et al. (2014) evaluated this measure against CBCL and reported that the Pearson coefficients between the SDQ and the CBCL were good, between 0.59 and 0.87.

Achenbach et al. (2008) reported that Goodman & Scott (1999) used a sample of 132 children aged 4–7 years attending dental clinics or psychiatric clinics in London to study the correlation between the mothers' ratings on the SDQ subscales and on the CBCL scales. Goodman & Scott (1999) reported Pearson correlation coefficients between 0.59 and 0.84 (the mean was 0.72).

There is also some evidence to suggest that the SDQ correlates well with clinicians' reports. Mathai, Anderson, & Bourne (2003) reported that the Hyperactivity subscale showed a good correlation with the clinicians' diagnoses ($\tau = 0.433$, $p < 0.001$), while the Conduct problems and Emotional disorders subscales showed moderate correlations ($\tau = 0.304$, $p < 0.001$ and $\tau = 0.258$, $p < 0.002$ respectively). The study was conducted in Australia with a sample of 130 parents of children aged 4–15 years.

Terrelonge & Fugard (2017) reported the all SDQ subscales showed moderate correlations with CGAS, a clinician-rated scale of general functioning ($r = -0.25$ to -0.14 at Time 1 and $r = -0.45$ to -0.29 at Time 2). Correlations between CGAS and the pro-social behaviour subscale (a positively rated item) were $r = 0.20$ at Time 1 and $r = 0.34$ at Time 2.

Sensitivity to change

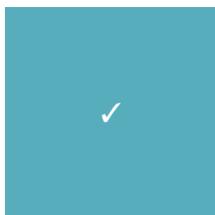
There is evidence that the SDQ can detect changes after participation in short parenting and co-parenting interventions.

Keating et al. (2015) reported that the SDQ detected changes from pre-test to follow-up (SDQ total difficulties: $F = 8.24$, $p < 0.01$). This study was a cluster RCT conducted in Ireland, on the Parents Plus Parenting when Separated programme (a six-week course), aimed at reducing child emotional and behaviour problems. This study was conducted with a sample of 161 separated parents and children (71% female, 79% single and 71.4% had custody of their children, mean age of children = 9.43 years).

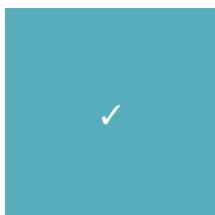
Nitsch et al. (2015) reported that the SDQ detected changes from pre-test to follow-up (SDQ total difficulties: $F = 64.07$, $p < 0.001$. SDQ Conduct Scale: $F = 19.98$, $p < 0.001$. SDQ Emotional Scale: $F = 62.76$, $p < 0.001$. SDQ Peer Scale: $F = 11.51$, $p < 0.001$. SDQ Prosocial Scale: $F = 9.19$, $p < 0.001$). This study was an RCT conducted in Ireland on the Parents Plus Adolescent Programme (a six-month programme) aimed at reducing adolescent behaviour problems. This study was conducted with a sample of 126 parents with children between the ages of 10–16 (61% female, mean age of children = 12.34 years).

The developers suggested that the standard SDQ (which asks parents to reflect on their child's behaviour in the last six months) should not be used more often than every six months, or there will be overlapping reference periods. To evaluate an intervention, it is best to start with the standard version of the SDQ, and then use a follow-up version, which asks parents to reflect on their child's behaviour in the last month. The follow-up version is available at: [https://www.sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz\(UK\)](https://www.sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz(UK)).

Implementation features in detail

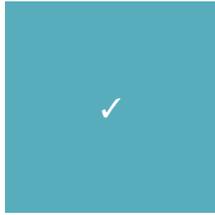
Brevity

This measure has 25 items.

Availability

This measure is free to use and does not require a clinical license. Further details can be found at: <https://www.sdqinfo.org/py/sdqinfo/b0.py>.

Ease of scoring

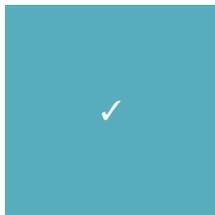


The SDQ has simple scoring instructions involving basic calculations. It does not need to be scored by someone with specific training or qualifications. Scoring can be done by hand or using the scoring website: <https://sdqscore.org/>.

It is usually easiest to score all five scales first before working out the Total Difficulties score. The overall (five-subscale) SDQ score ranges from 0 to 50, with a higher score indicating abnormal behaviours. The Total Difficulties score ranges from 0 to 40. The externalising score ranges from 0 to 20 and is the sum of the conduct and hyperactivity scales. The internalising score ranges from 0 to 20 and is the sum of the emotional and peer problems scales.

UK cut-offs are available at <http://www.sdqinfo.org/g0.html>.

Used in the UK



The SDQ is a commonly used measure which has been cited in several UK studies, including in the assessment of the Incredible Years Pre-School parenting programme, the Secondary Social and Emotional Aspects of Learning (SEAL) programme, Triple-P, the Systemic Transition in Education Programme for Autism Spectrum Disorder (STEP-ASD), and the Parenting Early Intervention Programme (Cullen et al., 2013; Edwards et al., 2016; Humphrey et al., 2010; Little et al., 2012; Mandy et al., 2012). In our review of the evidence we also found several UK longitudinal studies using SDQ.

Language(s)

The SDQ is available in English. The measure has also been officially translated by the developers into more than 50 languages, with the complete list available here: <https://sdqinfo.org/py/sdqinfo/b0.py>.

References

- Achenbach, T.M., Becker, A., Dopfner, M., Heiervang, E., Roessner, V., Steinhausen H. C., & Rothenberger A. (2008). Multicultural assessment of child and adolescent psychopathology with ASEBA and SDQ instruments: Research findings, applications, and future directions. *Journal of Child Psychology and Psychiatry*, 49(3).
- Childs, J., Deighton, J., & Wolpert, M. (2013). *Defining and measuring mental health and wellbeing: A response mode report requested by the Department of Health for the Policy Research Unit in the Health of Children, Young People and Families*. Retrieved from http://www.ucl.ac.uk/ebpu/docs/publication_files/Defining_and_measuring_mental_health_and_wellbeing_in_children-CPRU_RM_report.pdf
- Cullen, S.M., Cullen, M.-A., Lindsay, G., & Strand S. (2013). The Parenting Early Intervention Programme in England, 2006–2011: A classed experience? *British Educational Research Journal*, 39(6), 1025–1043.
- Deighton, J., Croudace, T., Fonagy, P., Brown, J., Patalay P., & Wolpert, M. (2014). Measuring mental health and wellbeing outcomes for children and adolescents to inform practice and policy: A review of child self-report measures. *Child and Adolescent Psychiatry and Mental Health*, 8.
- Edwards, R.T., Jones, C., Berry, V., Charles, J., Linck, P., Bywater, T., & Hutchings, J. (2016). Incredible Years parenting programme: Cost-effectiveness and implementation. *Journal of Children's Services*, 11(1), 54–72.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38, 581–586.
- Haywood, K., Collin, S., & Crawley, E. (2014). Assessing severity of illness and outcomes of treatment in children with chronic fatigue syndrome/myalgic encephalomyelitis (CFS/ME): A systematic review of patient-reported outcome measures (PROMs). *Child: Care, Health and Development*, 40(6), 806–824.

- He, J.P., Burstein, M., Schmitz, A., & Merikangas, K.R. (2013). The Strengths and Difficulties Questionnaire (SDQ): The factor structure and scale validation in US adolescents. *Journal of Abnormal Child Psychology*, 41(4), 583–595.
- Hessel, H., He, Y., & Dworkin, J. (2017). Paternal monitoring: The relationship between online and in-person solicitation and youth outcomes. *Journal of Youth and Adolescence*, 46(2), 288–299.
- Humphrey, N., Lendrum, A., & Wigelsworth, M. (2010). *Social and emotional aspects of learning (SEAL) programme in secondary schools: National evaluation*. London: Department for Education.
- Keating, A., Sharry, J., Murphy, M., Rooney, B., Carr, A. (2016). An evaluation of the parents plus–Parenting when separated programme. *Clinical Child Psychology and Psychiatry*, 21(2), 240–254.
- Little, M., Berry, V. L., Morpeth, L., Blower, S., Axford, N., Taylor, R., Bywater, T., Lehtonen, M., & Tobin, K. (2012). The impact of three evidence-based programmes delivered in public systems in Birmingham, UK. *International Journal of Conflict and Violence*, 6(2), 260–272.
- Mandy, W., Murin, M., Baykaner, O., Staunton, S., Cobb, R., Hellriegel, J., Anderson, S., & Skuse, D. (2016). Easing the transition to secondary education for children with autism spectrum disorder: An evaluation of the Systemic Transition in Education Programme for Autism Spectrum Disorder (STEP-ASD). *Autism*, 20(5), 580–590.
- Mathai, J., Anderson, P., & Bourne, A. (2003). Use of the Strengths and Difficulties Questionnaire as an outcome measure in a child and adolescent mental health service. *Australasian Psychiatry*, 11(3), 334–337.
- Mark, K.M., & Pike, A. (2017). Links between marital quality, the mother-child relationship and child behavior: A multi-level modeling approach. *International Journal of Behavioral Development*, 41(2), 285–294.
- Nitsch, E., Hannon, G., Rickard, E., Houghton, S., & Sharry, J. (2015). Positive parenting: A randomised controlled trial evaluation of the Parents Plus Adolescent Programme in schools. *Child and Adolescent Psychiatry and Mental Health*, 9(1), 43.
- Palmieri, P. A., & Smith, G.C. (2007). Examining the structural validity of the Strengths and Difficulties Questionnaire (SDQ) in a U.S. sample of custodial grandmothers. *Psychological Assessment*, 19(2), 189–198.
- Rothenberger, A., & Woerner, W. (2004). Strengths and Difficulties Questionnaire (SDQ) – Evaluations and applications. *European Child & Adolescent Psychiatry*, 13(Suppl2), 111–112.
- Stone, L. L., Otten, R., Engels, R.C., Vermulst, A.A., & Janssens, J.M. (2010). Psychometric properties of the parent and teacher versions of the strengths and difficulties questionnaire for 4- to 12-year-olds: A review. *Clinical Child and Family Psychology Review*, 13(3).
- Terrelonge, D.N., & Fugard, A.J. (2017). Associations between family and clinician ratings of child mental health: A study of UK CAMHS assessments and outcomes. *Clinical Child Psychology and Psychiatry*, 22(4), 664–674.
- Tsang, K.L.V., Wong, P.Y.H., & Lo, S.K. (2012). Assessing psychosocial well-being of adolescents: A systematic review of measuring instruments. *Child: Care, Health and Development*, 38(5).
- Vostanis, P. (2006). Strengths and Difficulties Questionnaire: Research and clinical applications. *Current Opinion in Psychiatry*, 19(4), 367–372.
- Warnick, E.M., Bracken, M.B., & Kasl, S. (2008). Screening efficiency of the Child Behavior Checklist and Strengths and Difficulties Questionnaire: A systematic review. *Child and Adolescent Mental Health*, 13(3), 140–147.

