

The Strengths and Difficulties Questionnaire (SDQ)

Study Year 28

Fast Track Project Technical Report

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Citation

Instrument

Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, 38, 581-586.

Mieloo, Cathelijne et al. "Validity and reliability of the strengths and difficulties questionnaire in 5-6 year olds: differences by gender or by parental education?" *PLoS one* vol. 7,5 (2012): e36805.
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Report

Lu, A. and Godwin, J. (2022). The Strengths and Difficulties Questionnaire (Fast Track Project Technical Report). Available from the Fast Track Project website: <http://www.fasttrackproject.org>

Measure Description

The Strengths and Difficulties Questionnaire (SDQ) is a brief 25-item behavioral screening questionnaire capturing positive and negative attributes of children age 2 to 17 year olds. Compared with well-established Rutter questionnaires, the SDQ has high validity and reliability (Goodman 1997). Furthermore, the SDQ offers the following additional advantages: a focus on strengths as well as difficulties; better coverage of inattention, peer relationships, and prosocial behavior; a shorter format; and a single form suitable for both parents and teachers, perhaps thereby increasing parent-teacher correlations (Goodman 1997). Four of the subscales on the parent SDQ. Alphas were generally higher for male children and for low parental education level (Mieloo 2012).

For the Fast Track Project, participants completed the Strengths and Difficulties Questionnaire for each of their children ages 2 to 17 years old.

Report Sample

This report provides descriptive statistics for the cohort 1 normative sample (original n=387). In addition, this report compares the means for two additional samples: high-risk control sample from cohort 1 (n=155) and the non-high-risk normative sample from cohort 1 (n=308). The non-high-risk normative sample excludes the high-risk normative participants who are also a part of the high-risk normative sample (n=79). In year 28, 288 cohort 1 normative participants, 104 high-risk control cohort 1 participants and 234 non-risk normative participants completed the survey. The Strengths and Difficulties Questionnaire was completed only by participants who reported actively parenting at least one child between ages 2 and 17. In year 28, 193 normative parents completed the SDQ about their 406 offspring, by 70 high-risk control parents completed the SDQ about their 153 offspring, and by 153 non-risk normative parents completed the SDQ about their 308 offspring in year 28.

Scaling

The SDQ contains characteristics and behaviors across five domains: conduct problems ($n = 5$; c28fr05, c28fr07r, c28fr12, c28fr18, and c28fr22), emotional problems ($n = 5$; c28fr03, c28fr08, c28fr13, c28fr16, and c28fr24), hyperactivity symptoms ($n = 5$; c28fr02, c28fr10, c28fr15, c28fr21r, and c28fr25r), peer problems ($n = 5$; c28fr06, c28fr11r, c28fr14r, c28fr19, and c28fr23), prosocial ($n = 5$; c28fr01, c28fr04, c28fr09, c28fr17, and c28fr20). Items are scored as 'Not True'

(0), 'Somewhat True' (1), or 'Certainly True' (2). Missing values are coded as follows: if the child is younger than 2 years old (.Y), older than 17 years old (.O), not eligible (.S), or deceased (.D).

c28fr01	In the past 6 months, was your child considerate of other people's feelings?
c28fr02	In the past 6 months, was your child restless, overactive, or could not stay still for long?
c28fr03	In the past 6 months, did your child often complain of headaches, stomachaches, or sickness?
c28fr04	In the past 6 mos, did your child chare readily with other youth, for example school books, games, or food?
c28fr05	In the past 6 months, did your child often lose his or her temper?
c28fr06	In the past 6 months, did your child prefer to be alone than with other youth?
c28fr07	In the past 6 months, was your child generally well behaved and usually did what adults requested?
c28fr07r	Reversed: In the past 6 mos, was your child generally well behaved and usually did what adults requested?
c28fr08	In the past 6 months, did your child have many worries or often seemed worried?
c28fr09	In the past 6 months, was your child helpful is someone was hurt, upset, or feeling ill?
c28fr10	In the past 6 months, was your child constantly fidgeting or squirming?
c28fr11	In the past 6 months, did your child have at least one good friend?
c28fr11r	Reversed: In the past 6 months, did your child have at least one good friend?
c28fr12	In the past 6 months, did your child often fight with other youth or bully them?
c28fr13	In the past 6 months, was your child often unhappy, depressed, or tearful?
c28fr14	In the past 6 months, was your child generally liked by other youth?
c28fr14r	Reversed: In the past 6 months, was your child generally liked by other youth?
c28fr15	In the past 6 months, was your child easily distracted or did their concentration wander?
c28fr16	In the past 6 months, was your child nervous in new situations or easily lost confidence?
c28fr17	In the past 6 months, was your child kind to younger children?
c28fr18	In the past 6 months, did your child often lie or cheat?
c28fr19	In the past 6 months, was your child picked on or bullied by other youth?
c28fr20	In the past 6 months, did your child often offer to help others (parents, teachers, children)?
c28fr21	In the past 6 months, did your child think things out before acting?
c28fr21r	Reversed: In the past 6 months, did your child think things out before acting?
c28fr22	In the past 6 months, did your child steal from home, school, or elsewhere?
c28fr23	In the past 6 months, did your child get along better with adults than with other youth?
c28fr24	In the past 6 months, did your child have many fears or get scared easily?
c28fr25	In the past 6 months, did your child have a good attention span or see work through to the end?
c28fr25r	Reversed: In the past 6 months, did your child have a good attention span or see work through to the end?

No total sum score was created. Five sub-scales were created summing across the items within each of the 5 domains (sdq28con, sdq28emo, sdq28hyp, sdq28per, sdq28pro). In addition, a total problem score was created by summing across items in all domains, excluding prosocial items (sdq28tot).

For each of these domains and the total problem score, dichotomous indicators for abnormal problems were created using cutoffs based on a representative United Kingdom sample aged 4-17 (<https://www.sdqinfo.org/>). The following cutoffs were used:

- Control Problems: Greater than or equal to 4
- Emotional Problems: Greater than or equal to 5
- Hyperactivity Problems: Greater than or equal to 7
- Peer Problems: Greater than or equal to 4
- Prosocial Problems: Less than 5

- Total Problems: Greater than or equal to 17

Scales	Items	Description
sdq28con	c28fr05, c28fr07r, c28fr12, c28fr18, c28fr22	Conduct Problem Scale
sdq28emo	c28fr03, c28fr08, c28fr13, c28fr16, c28fr24	Emotional Problem Scale
sdq28hyp	c28fr02, c28fr10, c28fr15, c28fr21r, c28fr25r	Hyperactivity Scale
sdq28per	c28fr06, c28fr11r, c28fr14r, c28fr19, c28fr23	Peer Problems Scale
sdq28pro	c28fr01, c28fr04, c28fr09, c28fr17, c28fr20	Prosocial Scale
sdq28tot	c28fr02-03, c28fr05-06, c28fr07r, c28fr08, c28fr10, c28fr11r, c28fr12-13, c28fr14r, c28fr15, c28fr16, c28fr18-19, c28fr21r, c28fr22-24, c28fr25r	Total Problem Scale
sdq28aco	sdq28con >= 4	Abnormal Conduct Problem Score
sdq28aem	sdq28emo >= 5	Abnormal Emotional Problem Score
sdq28ahy	sdq28hyp >= 7	Abnormal Hyperactivity Problem Score
sdq28ape	sdq28per >= 4	Abnormal Peer Problem Score
sdq28apr	sdq28pro < 5	Abnormal Prosocial Score
sdq28ato	sdq28tot >= 17	Abnormal Total Problem Score

Descriptive Statistics

Full Normative Sample:

		Full Normative Sample					
		Cronbach's alpha	N	Mean	SD	Min	Max
sdq28con	Conduct Problem Scale	0.69	406	1.47	1.75	0	10
sdq28emo	Emotional Problem Scale	0.75	406	1.63	1.94	0	10
sdq28hyp	Hyperactivity Scale	0.82	406	3.61	2.73	0	10
sdq28per	Peer Problems Scale	0.55	406	1.77	1.83	0	10
sdq28pro	Prosocial Scale	0.82	406	7.99	2.31	0	10
sdq28tot	Total Problem Scale	0.85	406	8.49	6.28	0	38
sdq28aco*	Abnormal Conduct Problem Indicator		406	0.11		0	1
sdq28aem*	Abnormal Emotional Problem Indicator		406	0.10		0	1
sdq28ahy*	Abnormal Hyperactivity Problem Indicator		406	0.15		0	1
sdq28ape*	Abnormal Peer Problem Indicator		406	0.18		0	1
sdq28apr*	Abnormal Prosocial Indicator		406	0.08		0	1
sdq28ato*	Abnormal Total Problem Indicator		406	0.12		0	1

*The standard deviation and Cronbach's alpha coefficient are not calculated for dichotomous scales.

Comparison of Non-High Risk Normative and High Risk Control Samples

There is no evidence of statistically significant differences between the high-risk control sample and the non-high-risk normative sample across the SDQ scales.

		Non-High Risk Normative			High Risk Control			t-test*/Chi Sq Results**		
		N	Mean	SD	N	Mean	SD	DF	t /chi sq	pval
sdq28con	Conduct Problem Scale	308	1.49	1.79	153	1.38	1.70	459	0.62	0.53
sdq28emo	Emotional Problem Scale	308	1.67	2.01	153	1.65	1.98	459	0.07	0.94
sdq28hyp	Hyperactivity Scale	308	3.80	2.64	153	3.36	2.95	459	1.61	0.11
sdq28per	Peer Problems Scale	308	1.78	1.86	153	1.61	1.70	459	0.96	0.34
sdq28pro	Prosocial Scale	308	7.95	2.26	153	8.20	2.37	459	-1.10	0.27
sdq28tot	Total Problem Scale	308	8.73	6.21	153	8.00	6.50	459	1.18	0.24
sdq28aco*	Abnormal Conduct Problem Indicator	308	0.10	0.31	153	0.12	0.33	1	0.43	0.51
sdq28aem*	Abnormal Emotional Problem Indicator	308	0.10	0.30	153	0.10	0.30	1	0.00	0.98
sdq28ahy*	Abnormal Hyperactivity Problem Indicator	308	0.16	0.37	153	0.16	0.37	1	0.01	0.91
sdq28ape*	Abnormal Peer Problem Indicator	308	0.17	0.38	153	0.18	0.38	1	0.01	0.91
sdq28apr*	Abnormal Prosocial Indicator	308	0.08	0.27	153	0.07	0.25	1	0.36	0.55
sdq28ato*	Abnormal Total Problem Indicator	308	0.12	0.32	153	0.12	0.33	1	0.05	0.82

*If the null hypothesis of equal variances is rejected, the t-test estimates shown in the table assume unequal variances, otherwise the t-test results shown assume equal variances.

**Chi square tests are used to detect differences in dichotomous scales.

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