



Does the multi-informant Strengths and Difficulties Questionnaire (SDQ) predict adolescent psychiatric diagnoses?

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What & Why

The Strengths and Difficulties Questionnaire (SDQ) is internationally widely used to screen for psychosocial problems among adolescents. In clinical settings, the SDQ is used to provide clinicians with a preliminary impression of the type of problems at hand. Currently, knowledge on how useful the SDQ is for predicting adolescent psychiatric diagnoses is limited. We assessed the **predictive** and **discriminative** value of **adolescent-** and **parent-rated** SDQ scores for psychiatric disorders, diagnosed by professionals in outpatient community clinics, in a sample of **2753** Dutch adolescents aged 12–17.

How

Per SDQ scale, its **predictive strength** for the disorder it is content-wise **related** to (hyperactivity/inattention scale for ADHD, conduct scale for CD/ODD, emotional scale for Anxiety/Mood disorder, social and prosocial scales for ASD), was assessed through a logistic regression analysis.

The **discriminative strength** of the SDQ scales was assessed through additional logistic regression analyses by using the SDQ scales to predict the disorders they are content-wise **unrelated** to.

Results

Predictive strength

Assess how well each SDQ scale predicts the disorder it is content-wise related to:

AUC values indicating predictive strength per disorder

Disorder	SDQ scale(s)	Informant		
		Adolescent	Parent	Both
ADHD ^a	Hyperactivity	.74	.78	.80
Anxiety/Mood disorder	Emotional	.73	.69	.74
ASD	Social + Prosocial	.63	.74	.74
CD/ODD	Conduct	.69	.76	.77

AUC = Area under the (receiver operating) curve

^a ADHD = Attention-Deficit/Hyperactivity Disorder (n = 872), Anxiety/Mood disorder (n = 1,179), ASD = Autism Spectrum Disorder (n = 620), CD/ODD = Conduct/ Oppositional Disorder (n = 323)

^b green: AUC > .70 (sufficient), red: AUC < .70 (insufficient)

Results (continued)

Discriminative strength

Assess how well each SDQ scale unintentionally predicts the disorders it is content-wise unrelated to:

AUC values indicating discriminative strength per disorder

Disorder	SDQ scale(s)	Informant		
		Adolescent	Parent	Both
ADHD ^a	Conduct	.64^b	.64	.65
	Emotional	.67	.64	.68
	Social + Prosocial	.61	.59	.59
Anxiety/Mood disorder	Conduct	.56	.62	.62
	Hyperactivity	.55	.63	.65
	Social + Prosocial	.59	.59	.59
ASD	Emotional	.53	.56	.60
	Conduct	.49	.54	.54
	Hyperactivity	.53	.54	.59
CD/ODD	Emotional	.72	.66	.72
	Hyperactivity	.54	.64	.64
	Social + Prosocial	.60	.64	.64

AUC = Area under the (receiver operating) curve

^a ADHD = Attention-Deficit/Hyperactivity Disorder (n = 872), Anxiety/Mood disorder (n = 1,179), ASD = Autism Spectrum Disorder (n = 620), CD/ODD = Conduct/ Oppositional Disorder (n = 323)

^b green: AUC < .70 (sufficient), red: AUC > .70 (insufficient)

Conclusion & Implication

Adolescent as informant

- The hyperactivity scale is predictive for ADHD

Parent as informant

- The hyperactivity scale is predictive for ADHD
- The conduct scale is predictive for CD/ODD
- The social & prosocial scales are predictive for ASD

Besides being sufficiently predictive, each above mentioned scale sufficiently discriminates between the disorder it is content-wise related to and other disorders.

The SDQ emotional scale is insufficiently indicative of the presence of Anxiety/Mood disorders, regardless of the informant that was used.

The findings suggest that parent-rated SDQ scores can be used to provide clinicians with a preliminary impression of the type of problems for ADHD, CD/ODD, and ASD, and adolescent-rated scores for ADHD.

Want to read more?

Vugteveen, J., De Bildt, A., Hartman, C., & Timmerman, M. (2018). Using the Dutch multi-informant strengths and difficulties questionnaire (SDQ) to predict adolescent psychiatric diagnoses. *European Child & Adolescent Psychiatry*, 1-13.

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