led to the creation of Kendra's law (Appelbaum, 2005).

## Conclusions

Civil commitment laws continue to evolve, with changing standards in mental healthcare often spurred by tragic events that bring the nexus between violence and mental illness into our living rooms. There appear to be two certainties regarding civil commitment standards in the USA. First, commitment laws will remain controversial and contentious as states try to strike a balance between rights and safeguards. Second, there are likely to be further changes in civil commitment standards with the advent of new treatments and, unfortunately, further acts of high-profile violence.

## References

Appelbaum, P. (2005) Assessing Kendra's law: five years of outpatient commitment in New York. *Law and Psychiatry*, 56, 791–792.

Elbogen, E. B. & Johnson, S. C. (2009) The intricate link between violence and mental disorder. Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry*, **66**, 152–161. Erickson, S., Vitacco, M. & VanRybroek, G. (2005) Beyond overt violence: Wisconsin's progressive civil commitment statute as a marker of a new era in mental health law. *Marquette Law Review*, **89**, 359.

Hoge, S. (2010) Commentary. Resistance to Jackson v. Indiana – civil commitment of defendants who cannot be restored to competence. Journal of the American Academy of Psychiatry and the Law, 38, 359–364.

Pfeffer, A. (2008) 'Imminent danger' and inconsistency: the need for national reform of the 'imminent danger' standard for involuntary civil commitment in the wake of the Virginia Tech tragedy. *Cardozo Law Review*, **30**, 277–315.

Winter, M. (2012) Loughner loses appeal to halt forced medication. USA Today, 5 March.

Addington v. Texas, 441, U.S. 418 (1979) Baxstrom v. R. E. Herold, 383 U.S. 107 (1966) Jackson v. Indiana, 406 U.S. 715 (1972) Kansas v. Crane, 534 U.S. 407 (2002) Kansas v. Hendricks, 521 U.S. 346 (1997) Lessard v. Schmidt, 349 F. Supp. 1078 (E.D. Wis. 1972) O'Connor v. Donaldson, 422 U.S. 563 (1975)



# The cross-cultural sensitivity of the Strengths and Difficulties Questionnaire (SDQ): a comparative analysis of Gujarati and British children

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<sup>2</sup>Freud Memorial Professor, Research Department of Clinical, Educational and Health Psychology, University College London, London, UK, email p.fonagy@ucl.ac.uk The authors would like to acknowledge the help of Ms Kathryn Newberg with the preparation of this paper. The purpose of this study was to investigate whether the Strengths and Difficulties Questionnaire (SDQ) may be considered a reliable measure of child behaviour, social functioning and adjustment in an Indian Gujarati context. The sample comprised 351 children who were classified as coming from a 'poverty' or 'non-poverty' background. The means and standard deviations for the SDQ total and five behavioural scales, as rated by children themselves, were first calculated for the entire Gujarati sample, then for the poverty and non-poverty subgroups. The SDQ did prove to be an appropriate measure for behavioural assessment. Its cross-cultural sensitivity was ascertained by comparing it against a British normative population. Small effect sizes were seen in the Emotional subscale scores and scores for total difficulties, and medium and large effect sizes on the Prosocial and Peer subscales, respectively, with greater difficulties experienced by the Indian Gujarati sample than their British counterparts.

The main aim of the present study was to find the prevalence and distribution of behavioural problems using the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) in a sample of school-aged Gujarati children in order to identify socio-emotional patterns and adjustment issues. Additionally, a cross-cultural analysis compared the Gujarati sample's scores with those from a British normative sample of children.

The SDQ has subscales (with five items per scale) covering conduct problems, hyperactivity, emotional problems, peer and prosocial behaviour; the SDQ also gives a 'total difficulties score' (TDS), which, along with the prosocial score, indicates strengths such as positive social skills and general resilience.

It is critical to consider the cultural sensitivity of tools used for psychological testing (Birbili, 2000), especially when the population studied is different from the one in which the test was validated (Balaban, 2006). The SDQ is a brief yet comprehensive measure of a child's sociopsychological adjustment. Its factor structure, reliability and validity, sensitivity and specificity, and comparability with other instruments have been assessed in Britain (Goodman & Scott, 1999), Germany (Klasen *et al*, 2000), Bangladesh (Mullick & Goodman, 2001) and Sri Lanka (Prior *et al*, 2005), among other cultures.

## Method

A total of 358 children aged 8-16 years were administered the SDQ, parent and self-report version. Children included in the study were selected across two districts of Gujarat, covering two cities and two townships, approximately representative of children from families across the middle to low socioeconomic spectrum. However, it is acknowledged that this not an epidemiological study but one based on a convenience sample and constrained by funding and access to the population. While the sociodemographic data were analysed for these 358 participants, it was not possible fully to score the SDO forms for 7 children; therefore SDQ comparisons are done for a sample of 351 children. This sample was divided into 'poverty' (n = 248) and 'non-poverty' (n = 103)groups (Table 1), on the basis of whether the children had been classified as poor on the school register (a determination made by the Gujarat state government according to household income and family size). The British normative sample comprised 4228 children aged 11-15 taken from Goodman's norms database (http://www.sdqinfo. com/UKNorm.html).

The data were collected in December 2007 and February-March 2008. The aims and procedures of the study were explained to the parents and school teachers, and subsequently students were invited to participate. The teachers enabled testing to take place in the school settings and often helped by explaining the meaning of specific words or items in the questionnaires. The first step in data collection was to seek consent from parents as well as children. Information sheets with details of the study and researchers' contacts were distributed and once consent was given the questionnaires were distributed. The SDQ Gujarati self-report version was translated following a rigorous translation-back-translation procedure and establishment of semantic equivalence. The SDQ self-report versions in English and the newly translated Gujarati version were administered to children mostly at various schools and occasionally at homes

The research was approved by the research ethics committee at University College London (UCL) and was part of the first author's doctoral work conducted at UCL (2005–10).

## **Results and discussion**

## Rates of adjustment difficulties in Gujarati children

In this Gujarati sample, the SDQ indicated that 17.4% of the children had clinically significant emotional distress or behavioural problems, that is, were categorised as 'abnormal' on the TDS, while none of the children fell within the 'borderline'

## Table 1

Gender, age and religious affiliation of children in the study samples

	Gujarati sample ( <i>n</i> = 351)	Non-poverty subsample ( <i>n</i> = 103)	Poverty subsample (n = 248)	$\chi^2/\tau_b$	
Gender					
Boys	180	56 (51.4)	124 (49.8)	0.075	
Girls	178	53 (48.6)	125 (50.2)		
Age					
8–9	10	2 (1.8)	8 (3.2)	0.119*	
10–11	71	27 (24.8)	44 (17.7)		
12–13	158	55 (50.5)	103 (41.4)		
14–16	119	25 (22.9)	94 (37.8)		
Religion					
Hindu	335	104 (95.4)	231 (92.8)	0.880	
Muslim	23	5 (4.6)	18 (7.2)		

τ<sub>*h*</sub>, *P* < 0.05.

band and the other 82.6% of the sample recorded scores in the normal range (Table 2). On the Emotional, Conduct, Hyperactivity, Peer and Prosocial subscales less than 10% of the sample were in the 'abnormal' band.

In the TDS, Conduct, Hyperactivity and Peer subscale scores there were differences between the poverty and non-poverty groups. The data also pointed towards general adjustment problems and emotional turbulence experienced by adolescents in the Indian context. Unfortunately, the influence of age on adjustment difficulties (which in fact had not been a primary area of investigation for the study) could not be retrospectively analysed because too many of the children from rural Gujarat were not aware of their exact age.

The frequency of 'borderline' scores for conduct problems and peer relations points towards interesting cultural dynamics. In Indian culture, deference and obedience (Shweder et al, 1987) are generally demanded from children and young people. Many children during the assessment discussed how their parents and teachers had an authoritarian stance and moralistic social ethos. It could be that the higher borderline range of distress points to a dual awareness of cultural demands and the adolescent need to resist the imposition of norms and authority. Peer relations become critical at this stage, and it is interesting that the children seemed aware of their struggle to build friendships and bonds with people their age. It could be that there is tension between the two domains of peer relations and conduct (mainly played out within the familial domain), where energies may be diverted towards one at the cost of the other.

### Poverty and non-poverty group differences

The poverty group had a significantly lower proportion of children in the abnormal band (13.3% *v*. 27.2%) than the non-poverty group ( $\chi^2$  (1, 351) = 9.762, *P* = 0.002); both groups reported higher levels of distress than the suggested 10% band for extreme scores. None of the groups had participants in the borderline range and the

## Table 2

SDQ subscales and corresponding frequencies and percentages (across normal, borderline and abnormal SDQ score categories) for the Gujarati sample and *t*-test results of poverty and non-poverty groups

SDQ subscales	Number ( % ) of children in Goodman's behaviour bandings (Goodman, 1997)		Mean (s.d.) scores		t	Р	95% CI	R (effect size correlation)	
	Normal	Borderline	Abnormal	Non-poverty group ( <i>n</i> = 103)	Poverty group ( <i>n</i> = 248)				
Emotional	302 (86.0)	29 (8.3)	20 (5.7)	3.23 (2.02)	3.26 (2.02)	-0.123	NS	-0.49 to 0.44	NS
Conduct	277 (78.9)	42 (12.0)	32 (9.1)	2.52 (1.97)	2.02 (1.59)	2.300	0.023	0.07 to 0.94	0.12*
Hyperactivity	306 (87.2)	28 (8.0)	17 (4.8)	4.01 (1.76)	3.48 (1.48)	2.662	0.009	0.14 to 0.92	0.14**
Peer	274 (78.1)	56 (16.0)	21 (6.0)	2.74 (2.07)	2.22 (1.55)	2.300	0.023	0.07 to 0.97	0.12*
Prosocial	327 (93.2)	18 (5.1)	6 (1.7)	8.51 (1.61)	8.47 (1.64)	0.244	NS	–0.33 to 0.42	NS
TDS	290 (82.6)	0	61 (17.4)	12.50 (5.65)	10.98 (4.19)	2.466	0.015	0.30 to 2.74	0.13*

\*Small to \*\*medium effect sizes.

remainder belonged to the normal range of scores (86.7% v. 72.8%).

Small to medium effect sizes were seen in the TDS and on the Conduct, Peer and Hyperactivity subscales, with children in the poverty group scoring low or showing a tendency to underreport (it could be that they did not sufficiently understand items or got confused about the most appropriate response). In contrast, the non-poverty sample, even though their mean scores were well within the normal range, tended to report and share their difficulties actively. Of course, the two samples might differ in terms of functional literacy and socio-cognitive skills. It could be that children in the poverty group fare better despite economic constraints due to greater resilience in the face of adversity. Yet another explanation could be that psychological appraisal of one's difficulties and mental makeup might be possible only if one has some socioeconomic stability. Therefore, despite facing more difficulties, the poverty group reported fewer problems because they could not conceptualise the enormity of their struggles, whereas the non-poverty children engaged more with psychological turmoil and stress. The fact that the poverty sample consistently reported fewer difficulties could reflect a 'dismissing' style of response.

#### Comparison with the normative British sample

Comparing the Gujarati and British samples (Table 3), the difficulties reported on the TDS and the Emotional subscale suggest that differences between the two samples could be attributable to socioeconomic disparities or gaps in educational exposure, given Goodman's prediction for the percentage spread of psychopathology in any population (Goodman, 1997, 2002). The biggest difference can be seen on the Peer subscale, where a large effect size is reported.

The results suggest certain differences between the two national samples. The mean TDS of the Gujarati sample was higher and the small effect size conveys that, overall, the Gujarati children had experienced greater problems than their British counterparts. A significant difference between the two mean scores was seen in the Emotional subscale, where an effect size of 0.19 was found, with the Indian sample reporting higher mean difficulties than the British sample; a similar trend was seen on the Prosocial subscale, where an effect size of 0.30 was reported and the mean of the Gujarati sample was higher than that of the British sample. The higher the score on the Prosocial subscale, the lesser the difficulties and the greater the resilience, and a better mean score indicates that the Indian sample might have greater family or social support, which added to their resilience. In the case of the Peer subscale, a large effect size (0.58) was found, with the Indian sample reporting more difficulties than the British sample. The reasons for this effect have been discussed above.

### Limitations and concluding comments

The study was able to compare poverty and nonpoverty samples from Gujarat, and to highlight

#### Table 3

Effect size of difference in SDQ scores between Gujarati sample of 351 children and the British normative sample of 4228 children

SDQ subscales	Gujarati sample	British sample	Cohen's d	r	% of non-overlap
Emotional	3.2 (2.0)	2.8 (2.1)	0.19*	0.09	14.7
Conduct	2.2 (1.7)	2.2 (1.7)	-	-	0
Hyperactivity	3.6 (1.6)	3.8 (2.2)	-0.10	-0.05	-
Peer	2.4 (1.7)	1.5 (1.4)	0.58***	0.28	38.2
Prosocial	8.5 (1.6)	8.0 (1.7)	0.30**	0.15	21.3
TDS	11.4 (4.7)	10.3 (5.2)	0.22*	0.11	14.7

\*\*\* large effect size, \*\* medium effect size and \* small effect size.

psychosocial and cultural differences between Indian and British samples. A recent study by Goodman et al (2012) showed that the relationship between SDQ 'caseness' indicators and disorder rates varied substantially between populations. Cross-national differences in SDQ indicators do not necessarily reflect comparable differences in disorder rates. Therefore the results of the present study need to be interpreted with caution. What can be concluded more reliably is that, in the Indian sample, the poverty subsample faced additional challenges to the non-poverty subsample. For the Gujarati sample as a whole, the clinically significant difference found on peer relations indicates that they faced challenges in domains outside the family. A traditional family structure might help children to cope with some of these competing demands as low-income countries undergo social and economic changes.

The SDQ as a tool provides interesting and meaningful differentiations between the Indian and British and poverty/non-poverty subsamples that aid the overall purpose of this study.

### References

Balaban, V. (2006) Psychological assessment of children in disasters and emergencies. *Disasters*, **30**, 178–198.

Birbili, M. (2000) Translating from one language to another. *Social Science Update: Issue 31*. University of Surrey. Available at http:// sru.soc.surrey.ac.uk/SRU31.html (accessed January 2013).

Goodman, R. (1997) The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology and Psychiatry*, 38, 581–596.

Goodman, R. (2002) SDQ information website, http://www.sdqinfo. com (accessed January 2013).

Goodman, R. & Scott, S. (1999) Comparing the Strengths and Difficulties Questionnaire and the Child Behaviour Checklist: is small beautiful? *Journal of Abnormal Child Psychology*, 27, 17–24.

Goodman, A., Hieverbang, E., Fleitlich-Bilyk, B., *et al* (2012) Cross-national differences in questionnaire do not necessarily reflect comparable differences in disorder prevalence. *Social Psychiatry and Psychiatric Epidemiology*, **47**, 1321–1331.

Klasen, H., Woerner, W., Wolke, D., et al (2000) Comparing the German versions of the Strengths and Difficulties Questionnaire (SDQ-Deu) and the Child Behaviour Checklist. *European Child and Adolescent Psychiatry*, **9**, 271–276.

Mullick, M. & Goodman, R. (2001) Questionnaire screening for mental health problems in Bangladeshi children: a preliminary study. Social Psychiatry and Psychiatric Epidemiology, 36, 94–99.

Prior, M., Virasinghe, S. & Smart, D. (2005) Behavioural problems in Sri Lankan schoolchildren: associations with socio-economic status, age, gender, academic progress, ethnicity and religion. *Social Psychiatry and Psychiatric Epidemiology*, **40**, 654–662.

Shweder, R. A., Mohapatra, M. & Miller, J. G. (1987) Culture and moral development. In *The Emergence of Morality in Young Children* (eds J. Kagan & S. Lamb), pp. 1–83. University of Chicago Press.

# Pathways to mental healthcare in highincome and low-income countries

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SPECIAL

PAPER

Understanding the way in which people seek care for mental disorders is important for planning services, training and referral mechanisms. Pathways to care fall broadly into three categories: via primary care physicians; via native healers; and via patient choice (patients can have direct access to mental health professionals). The pattern and nature of access to service in low-income countries are different from those in high-income countries. In many societies, deep-seated cultural beliefs on the part of patients and families about the causes of mental disorders are a major barrier to the receipt of modern psychiatric care.

Pathways to care can be defined as the contacts made during the period between onset of illness and the initiation of treatment (Rogler & Cortes, 1993). Pathway studies have been used to investigate how people use services (including time on the pathway) and the role of carers. These studies can provide information regarding the way health services perform in relation to mental healthcare (Gater *et al*, 2005): how primary and general healthcare services are used; whether people with mental disorders seek help outside the formal healthcare services; where and when they get treatment, and what treatment they get; whether care is delayed; the variation in and duration of pathways; and who initiates the care seeking (Gater & Goldberg, 1991; Gater *et al*, 1991).

Pathway studies can also be used to help monitor the effects of service developments and to compare different services. If repeated, they can allow a comparison of service functioning to be made over time. The pathways method provides detailed service utilisation data, which can map the dynamic consequences of changes in service organisation and provision. It may be used to operationalise the measurement of service accessibility (Amaddeo *et al*, 2001). Moreover, the pattern of patient care-seeking is important for psychiatric service and policy (Giasuddin *et al*, 2012).

## Pathways to psychiatric care

Pathway studies have demonstrated that pathways to psychiatric care follow three patterns (Fujisawa *et al*, 2008).