



Government of **Western Australia**
Department of **Health**
Child and Adolescent Health Service

Adversity and resilience amongst resettling Western Australian paediatric refugees

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Refugee Health Service
Princess Margaret Hospital for Children

Overview



- PMH Refugee Health Service
- Childhood adversity
- Development of refugee-adverse childhood experiences score (R-ACE)
- Strengths and Difficulties Questionnaire
- Study Results
- Conclusions

PMH Refugee Health Service

- Established in 2006 (tertiary hospital)
- Over 300 new referrals annually (humanitarian entrants and asylum seekers <16 years)
- Most referred from WA Humanitarian Entrant Health Service; 15% currently asylum-seeker families



**PMH RHS family centred
multidisciplinary health care**

Social Work

Nursing

Dietician

Education

Dental

Immunisation

Transport
Volunteers
Medications


Clinical
research

Psychologist

Medical

Language
Services

Study Background

- Refugee children are exposed to many negative experiences
 - Cumulative negative childhood experiences have long-term consequences
 - Current RHS initial assessment includes standardised proformas (family/individual) including psychological symptoms
 - Concerns raised about under-reporting of psychological impact at first review
- 

CHILD AND ADOLESCENT HEALTH SERVICES
PRINCESS MARGARET HOSPITAL FOR CHILDREN
**REFUGEE HEALTH CLINIC
FAMILY SHEET**

Med Rec. No: _____
Surname: _____
Forename: _____
Sex: _____ D.O.B. _____

AFFIX LABEL HERE

Affix Labels of all Children in Family Here

(sticker section used for index filing)

Date: _____ Family phone number: _____

Referral details

Date of referral: / /
Referral source: HEHS GP PMH outpatient department PMH inpatient unit IHMS
 Other, specify: _____

Language details

Language services: Interpreter not required Interpreter present Phone interpreter
Languages spoken: _____

Transport details

Transport to clinic: PMH arranged and funded Public transport Private car
 Other, specify: _____

Refugee journey

Date arrived in Australia: / / Visa type: _____
Country of origin: _____
Country of first refuge: _____
Other transit countries: _____
Total transit time (years): _____ Time in a refugee camp (years): _____

Ever in detention: Yes No Time in detention (months): _____
Currently in detention: Yes No
Detention centre(s): _____

Nuclear family separation: During transit: Yes No Currently: Yes No

Family details

Mother: In Australia Overseas Deceased
Father: In Australia Overseas Deceased
Parents separated currently: Yes No
Relationship to guardian(s): _____
Number of siblings alive: _____ Number of siblings deceased: _____
Number of siblings in Australia: _____ Number of siblings overseas: _____

Extended family in Australia: Yes No _____

Family medical history: _____

Mother's highest level of education: _____
Father's highest level of education: _____

July 2014
PMM/7

MR370.01 REFUGEE HEALTH FAMILY SHEET

CHILD AND ADOLESCENT HEALTH SERVICES
PRINCESS MARGARET HOSPITAL FOR CHILDREN
**REFUGEE HEALTH CLINIC
FAMILY SHEET**

Family Tree

Mother's previous occupations: _____ TAFE Yes No
Father's previous occupations: _____ TAFE Yes No
Age Maternal Marriage: _____
Family home building type (house / apartment / townhouse / refuge): _____
Number of bedrooms: _____ Number of occupants: _____

Linked to a GP: Yes: _____ No Uncertain

GP uses an interpreter: Yes No Not required Bilingual Uncertain

Services used for translation of documents / mail: Centrelink Case worker
 Family / friends None

Additional issues within the family

Domestic violence: Yes No Uncertain
FGMC within the family: Yes No Uncertain
Underage engagement: Yes No Uncertain
Other: _____

Additional assistance provided

Centrelink payments: Yes No
Accessing childcare: Yes No
Date of birth change: Yes No Correct date of birth: _____
Reunification advocacy: Yes No Relationship to children: _____
Housing arrangements: Yes No Reason for problem: _____
ASETTS referral: Yes No Reason for referral: _____
Child protection unit referral: Yes No Reason for referral: _____
DCP referral: Yes No Reason for referral: _____
Other supports / referral: Yes No Reason for referral: _____

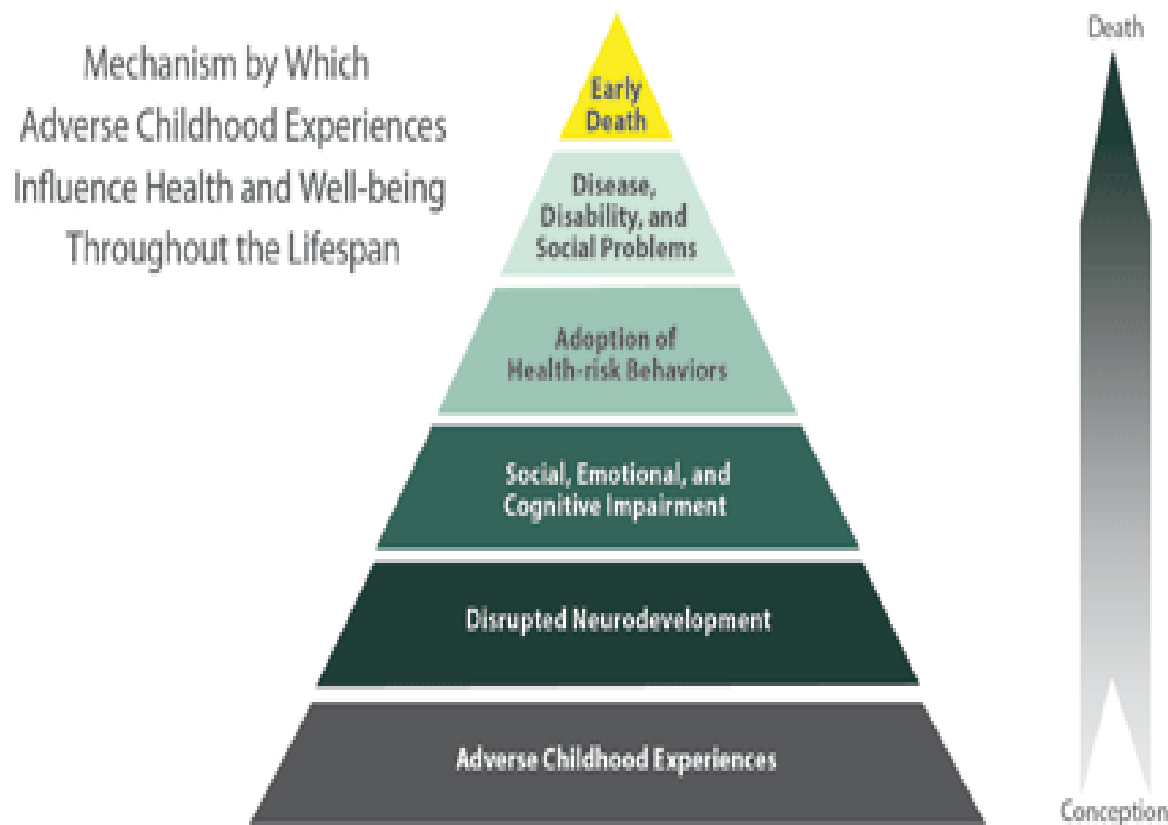
Signed: _____ Completed by: _____

MR370.01 REFUGEE HEALTH FAMILY SHEET

Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults

The Adverse Childhood Experiences (ACE) Study

Vincent J. Felitti, MD, FACP, Robert F. Anda, MD, MS, Dale Nordenberg, MD, David F. Williamson, MS, PhD, Alison M. Spitz, MS, MPH, Valerie Edwards, BA, Mary P. Koss, PhD, James S. Marks, MD, MPH



Adverse Childhood Experiences

CDC criteria (score 0-10)

1. Abuse (emotional)
2. Abuse (physical)
3. Abuse (sexual)
4. Maternal domestic violence
5. Substance Abuse
6. Mental Illness
7. Parental separation/divorce
8. Criminal household member
9. Neglect (emotional)
10. Neglect (physical)

Refugee Adverse Childhood Experiences

Refugee Adverse Childhood Experiences (score 0-20+): CDC ACE criteria plus:

11. Refugee Status
12. Family Separation (previous)
13. Family Separation (current)
14. Prolonged Transit (> 5 years)
15. Interrupted Schooling
16. Detention impact (family member previously detained)
17. Detention impact (previous child detention)
18. Detention impact (current child detention)
19. Witnessed trauma
- 20+. Death of nuclear family member (1 x R-ACE per deceased person)


Strengths and Difficulties Questionnaire

- Screening tool available in multiple languages
- Online, previously free to access**
- Parent, teacher, self-report versions
- Three age categories (2-4y, 4-10y, 11-17y)
- 25 questions (+ve and -ve); five scales

***fees recently introduced*



Strengths and Difficulties Questionnaire

- Five Scales
 - Emotional Symptoms
 - Conduct Problems
 - Inattention/Hyperactivity
 - Peer Problems
 - Prosocial Behaviour
 - Total Difficulties Score: sum of first four scales
 - Extended SDQ: impact statement, enquires about chronicity, distress, social impairment, burden for others
- 

Strengths and Difficulties Questionnaire

P 4-10

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of your child's behaviour over the last six months.

Your child's name

Male/Female

Date of birth.....

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with other children, for example toys, treats, pencils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often loses temper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, prefers to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally well behaved, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries or often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy, depressed or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily distracted, concentration wanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous or clingy in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies or cheats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picked on or bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often volunteers to help others (parents, teachers, other children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinks things out before acting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gets along better with adults than with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good attention span, sees chores or homework through to the end	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other comments or concerns?

Overall, do you think that your child has difficulties in one or more of the following areas:
emotions, concentration, behaviour or being able to get on with other people?

No	Yes- minor difficulties	Yes- definite difficulties	Yes- severe difficulties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered "Yes", please answer the following questions about these difficulties:

• How long have these difficulties been present?

Less than a month	1-5 months	6-12 months	Over a year
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties upset or distress your child?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


• Do the difficulties interfere with your child's everyday life in the following areas?

	Not at all	Only a little	Quite a lot	A great deal
HOME LIFE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRIENDSHIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASSROOM LEARNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEISURE ACTIVITIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties put a burden on you or the family as a whole?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Study Aims

- Identify refugee children/adolescents requiring targeted psychological intervention
 - Monitor mental health using follow-up SDQ
 - Hypotheses:
 - that refugee children would demonstrate elevated SDQ scores compared to Western population norms
 - symptom reporting would vary with time
- 

Study Design

**Addition of SDQ to standardised RHS proforma collection
(2014)**



**Review of patient records (Initial SDQs: Aug 2014-Jan
2016; follow-ups ceased June 2016)**



**R-ACE/Psych
Symptoms**

**SDQ
Results**

Results

- Total 204 patients audited (66.6% new patients)
 - 204 initial SDQs
 - 143 had six month follow up SDQ
- Majority completed in English using professional interpreters*
- Only 9.8% administered in non-English language (mostly Arabic)

* Interpreters used as per WA Department of Health Languages Services Policy

أستبيان مواطن القوة والصعوبة SDQ (4-17 سنة)
للوالدين

يرجى الإجابة على كل بند بـ : غير صحيح، صحيح نوعا ما ، او صحيح بالتأكيد بوضع علامه
تحت الأجابة المناسبة . حاول ان تكون دقيقا في إجابته. سوف يساعدنا كثيرا اذا اجبت على كل بند حتى وان
كنت غير متأكد او ترى انه غير مناسب. يرجى ان تكون اجابته حول سلوكه الطفل خلال السنة الأشهر الأخيرة .

اسم الطفل: ولد بنت

تاريخ الميلاد:

	صحيح بالتأكيد	صحيح نوعا ما	غير صحيح
يهتم بمشاعر الآخرين	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
لا يستطيع البقاء او الاستقرار في مكان واحد . كثير الحركة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
كثيرا ما يشكو من صداع او آلام في البطن او الشعور بالغثبان	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
يشترك الآخرين بسهولة فيما يخصه (لعب، أفلام، ألعاب، حويزاتالخ)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
كثيرا ما تنتابة نوبات من الغضب الشديد أو سريع الغضب	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
يحب العزلة، يميل الى اللعب لوحده	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
مطعم على وجه العموم، عادة يفعل ما يطلبه منه الكبار	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
يقلق من أشياء كثيرة، كثيرا ما يبدو عليه القلق	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Demographics

		n	%
Mean age	9.2 years		
Gender	Female	105	51.4
Main Ethnic Groups	Burmese	53	25.9
	Afghani	43	21
	Sudanese	15	7.3
	Ethiopian	15	7.3
	Congolese	11	5.4
	Somali	11	5.4
	Iranian	11	5.4
	Other	45	25.2
Maternal Education	Nil	88	43.6
Paternal Education	Nil	84	41.6
Initial SDQ Age	2-4	33	16.2
	4-10	89	43.6
	11-17	82	40.2

Psychological symptom screening

- 37% had at least one psychological symptom identified on initial proforma
 - Over half had multiple symptoms
- Most prevalent symptoms
 - Sleep disturbance (13.4%)
 - Separation anxiety (11.4%)
 - Excessive crying (10%)




Adverse refugee experiences

- Protracted refugee transit 45.5%
- Nuclear family separation common
 - 61.8% previous
 - 36.8% ongoing
- Parental death 19.1%
- Orphaned 6.4%
- Sibling death 19.1%
- Interrupted education 33%



Adverse refugee experiences (R-ACE)

- 63% experienced 3 or more adverse refugee experiences (R-ACE)
 - Higher R-ACE if:
 - African ethnicity
 - Older age (>10y)
 - Protracted transit time (>5 years)
 - Family separation
 - Separation anxiety on initial screening proforma
 - Nil formal maternal education
- 

Psychological problems and ACE findings disclosed at first RHS consultation

		Number	%
Psychological Symptomology (n=201)	Sleep disturbance	27	13.4
	Separation anxiety	23	11.4
	Excessive crying	20/200	10
	Secondary enuresis	20	9.9
	Aggression	15	7.5
	Nightmares	12	6
Adverse Childhood Experiences† (n=204)	Parent mental illness	23/204	11.3
	Maternal domestic violence	5/204	2.4
	Criminal household member	1/204	0.05

R-ACE findings (n=204)

Refugee Adverse Childhood Experiences	Family Separation	n	%
	Previous	126/204	61.8
Ongoing	75/204	36.8	
Prolonged Transit	87/191	45.5	
Interrupted Schooling	66/200	33	
Death of nuclear family			
One parent	39/204	19.1	
Both parents	13/204	6.4	
Sibling	28/204	13.7	
Detention impact			
Family detained	33/204	16.1	
Child detention (past)	15/204	7.4	
Child detention (current)	1/204	0.5	
Parent mental health illness	23/204	11.3	
Witnessed trauma	17/204	8.3	

Impact of Demographics on R-ACE

Variable (number)	R-ACE median scores (IQR)	p-value
Entire cohort (201)	3 (2-5)	n/a
Ethnic Region		
Africa (59)	5 (3-5)	< 0.001
SE Asia (68)	3 (2-4)	
Middle East (74)	3 (2-4)	
Age		
Age >10 years (80)	3.5 (3-5)	0.001
Age <10 years (121)	3 (2-4)	
Gender		
Male (98)	3 (2-5)	ns
Female (103)	3 (2-5)	ns
Parental education level		
Maternal education > primary (111)	2 (2-4)	<0.001
Nil formal maternal education (88)	4 (3-5)	
Paternal education > primary (117)	4 (3-5)	0.004
Nil formal paternal education (82)	2 (2-4)	
Psychological variables identified at first consultation		
Separation anxiety (23)	5 (3-5)	0.005
Nil separation anxiety (171)	3 (2-5)	

SDQ Initial Results


- Results varied with age/ethnicity
- 2-4yo: elevated peer problems, conduct problems, prosocial difficulties
- 4-10yo: elevated emotional symptoms scores and peer problem scores
- 11-17yo (SR in 90%): peer problem and hyperactivity scores elevated



- **Ethnicity**
 - SE Asia/Middle East: higher initial total difficulty scores compared to children from Africa

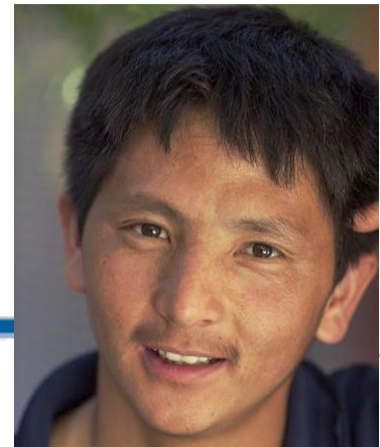
 - **Age**
 - Higher emotional symptom scores in children > 10 years
 - Lower hyperactivity scores in older children (did not reach significance $p = 0.081$)

 - **Maternal education > primary level**
 - Higher TD, H, CP, PP scores


 - **Nil demonstrated effect on SDQ**
 - with/without protracted transit time
 - ongoing family separation
 - paternal education level
 - interrupted schooling
 - gender
- 

SDQ 6 month follow up


- 2-4 years: no change in scores between initial/follow up SDQ
- 4-10 years: Improvement with total, emotional, hyperactivity, peer problem, prosocial scores at follow up
- 11-17 years: Improved total difficulty scores and peer problem scores



SDQ PMH RHS Evaluation

- Follow up SDQ assessment of patient/family perception of RHS
 - Majority (>80%) reported improvement since attending RHS (*“a bit/much better”*)
 - Majority (>80%) found the service helpful (*“quite a lot/a great deal”*)
- 


Summary – SDQ Results

- Total Difficulty scores not elevated across ages at expected frequencies
 - Elevated peer problem scores across all age groups
 - Variation with age/ethnicity/maternal education
 - Cross-cultural differences
 - African children highest R-ACE scores but lowest TD SDQ scores (reporting variability/timing of SDQ/resilience)
- 

Follow-up of adverse SDQ results

- After initial RHS assessment, almost half (42.6%) were referred for further psychosocial support
 - Internal services: ongoing Social Work input, Psychological Medicine
 - External services eg Association for Services to Torture and Trauma Survivors (ASeTTS)

Limitations and Challenges

- Use of a standardised questionnaire in a heterogeneous cohort
 - Logistical barriers to completion
 - Teacher SDQ's not utilised
 - Self-reporting in adolescent population
 - may underestimate own mental/psychosocial health problems
 - Recent difficulty with SDQ access/scoring/cost
- 

Conclusions and future directions

- Study identified high rates of adversity
- Psychological symptoms in many but resilience also seen
- SDQ supplemented RH clinical assessment and continues to be implemented
- Scope for implementation of other screening tools in RHS



Questions ?



Thank you to all the families, interpreters and RHS staff that contributed to the study.

PMH Refugee Health Service:

http://www.pmh.health.wa.gov.au/services/refugee_clinic/

Refugee Adverse Childhood Experiences

CDC criteria (score 0-10)	Refugee Adverse Childhood Experiences (score 0-20+)
<ol style="list-style-type: none">1. Abuse (emotional)2. Abuse (physical)3. Abuse (sexual)4. Maternal domestic violence5. Substance Abuse6. Mental Illness7. Parental separation/divorce8. Criminal household member9. Neglect (emotional)10. Neglect (physical)	<p>CDC ACE criteria, plus:</p> <ol style="list-style-type: none">11. Refugee Status12. Family Separation (previous)13. Family Separation (current)14. Prolonged Transit (> 5 years)15. Interrupted Schooling16. Detention impact (family member previously detained)17. Detention impact (previous child detention)18. Detention impact (current child detention)19. Witnessed trauma20+. Death of nuclear family member (1 x R-ACE per deceased person)

Mental health among refugee children – Initial SDQ scores stratified by age (percentage ≥5% for top bands in bold)

	P2-4 SDQ n=33	P4-10 SDQ n=89	11-17 SDQ n=82
Total Difficulty Score (0-40)			
Median (interquartile range)	7 (2.5-10.5)	7 (3-12)	7.5 (3-10)
Close to Average (%)	84.8	79.8	91.5
Slightly Raised (%)	3	7.9	4.9
High (%)	3	6.7	-
Very High (%)	9.1	5.6	3.7
Emotional Symptoms Score (0-10)			
Median (interquartile range)	0 (0-1.5)	1 (0-4)	2 (0-3.25)
Close to Average (%)	84.8	73	90.2
Slightly Raised (%)	6.1	11.2	2.4
High (%)	6.1	7.9	2.4
Very High (%)	3	7.9	4.9
Hyperactivity Score (0-10)			
Median (interquartile range)	3 (1-4.5)	2 (0-4)	2 (0-3)
Close to Average (%)	81.8	88.8	64.6
Slightly Raised (%)	9.1	5.6	14.6
High (%)	6.1	4.5	14.6
Very High (%)	3	1.1	6.1
Conduct Problems Score (0-10)			
Median (interquartile range)	1 (0-3.5)	1 (0-2)	1 (0-2)
Close to Average (%)	75.8	74.2	92.7
Slightly Raised (%)	12.1	12.4	6.1
High (%)	6.1	4.5	1.2
Very High (%)	6.1	9	-
Peer Problems Score (0-10)			
Median (interquartile range)	2 (1-3)	2 (0-3)	2 (0-2)
Close to Average (%)	60.6	74.2	64.6
Slightly Raised (%)	18.2	12.4	14.6
High (%)	15.2	4.5	14.6
Very High (%)	6.1	9	6.1
Prosocial Score (0-10)			
Median (interquartile range)	9 (7.5-10)	9 (7.5-10)	9 (8-10)
Close to Average (%)	78.8	78.7	86.6
Slightly Low (%)	9.1	10.1	6.1
Low (%)	12.1	7.9	6.1
Very Low (%)	-	3.4	1.2

SDQ Scoring

- Scored online or hard copy templates available
- Four bands of scores based on validated norms:
 - Close to average (80%)
 - Slightly raised/low (10%)
 - High/low (5%)
 - Very high/low (5%)

Strengths and Difficulties Questionnaire

(2016-08-31 04:10:11 GMT)

youthinmind

SDQ scores

Parent SDQ for 4-17 year olds

Score for overall stress	20	(20 - 40 is VERY HIGH)
Score for emotional distress	5	(5 - 6 is HIGH)
Score for behavioural difficulties	5	(4 - 5 is HIGH)
Score for hyperactivity and concentration difficulties	5	(0 - 5 is close to average)
Score for difficulties getting along with other children	5	(5 - 10 is VERY HIGH)
Score for kind and helpful behaviour	5	(0 - 5 is VERY LOW)