

# Social and emotional wellbeing of the New Zealand child population

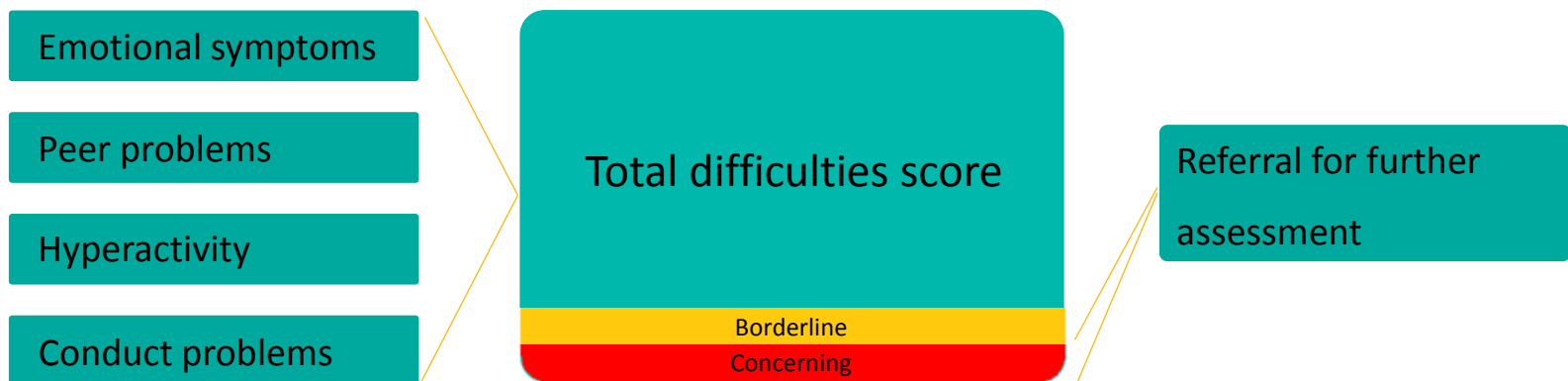
Strengths and Difficulties Questionnaire  
(Goodman 1997)

New Zealand Health Survey  
2012/13, 2014/15 and 2016/17

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# SDQ – social & emotional wellbeing

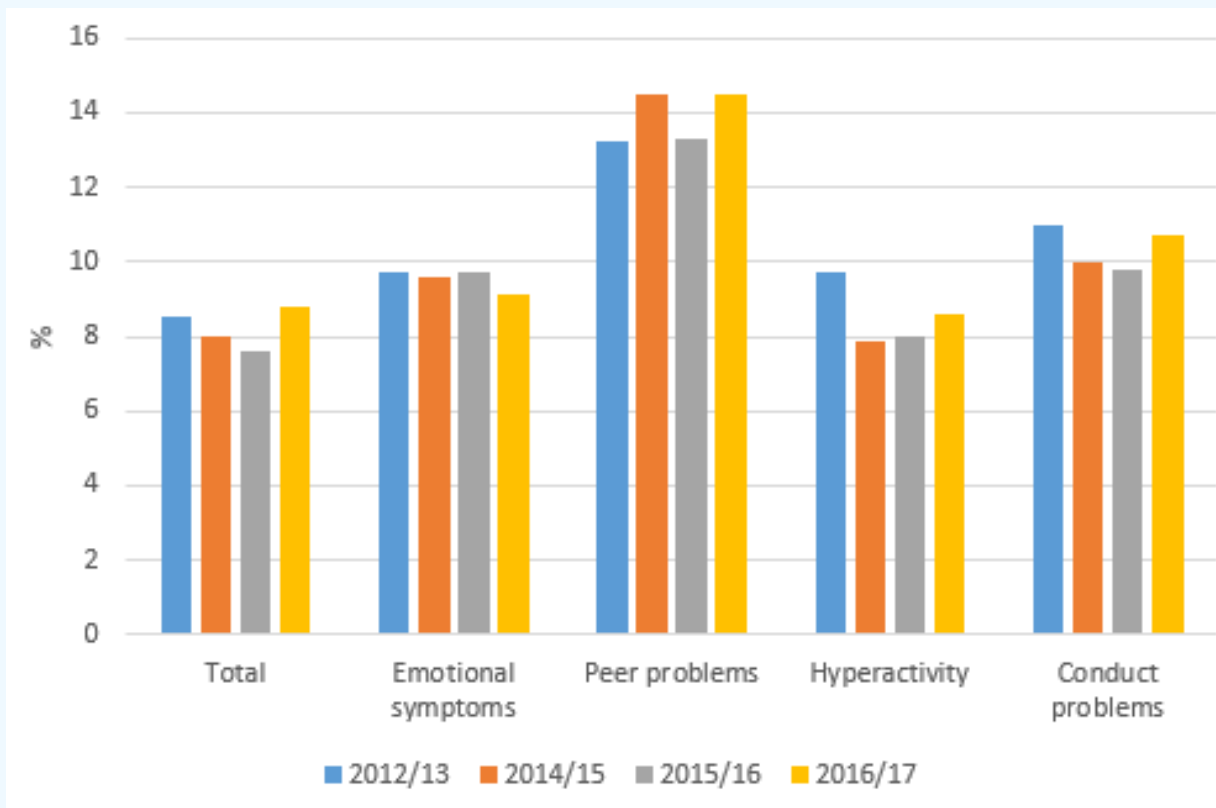
- Screening measure for social, emotional and behavioural problems in children (2-14 years)
- Widely used internationally
- Parents rate their child on 25 statements
- Covers 5 aspects of children's development: emotions, peer relationships, hyperactivity, conduct and prosocial behaviour.



# New Zealand Health Survey

- Surveys around 4,600 parents annually about their child (0-14 years)
- Core and module questions
- SDQ in child developmental health and wellbeing module in 2012/13, 2014/15, 2015/16 and 2016/17
- Total SDQ sample over the 3 years:  
10,457 children aged **3-14 years**
- Representative of the NZ child population

# No large difference across the years



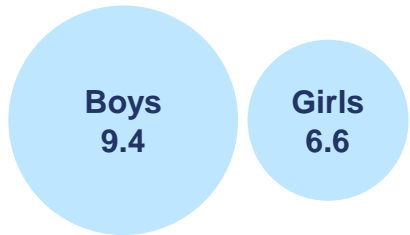
# About 8% of children experienced difficulties



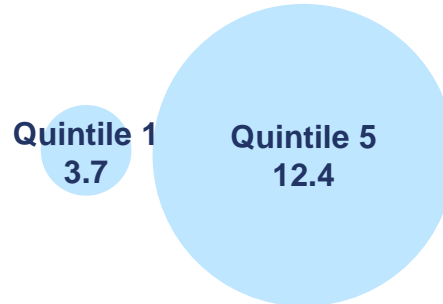
children 3-14 years had a total difficulties score indicating concern (8%)



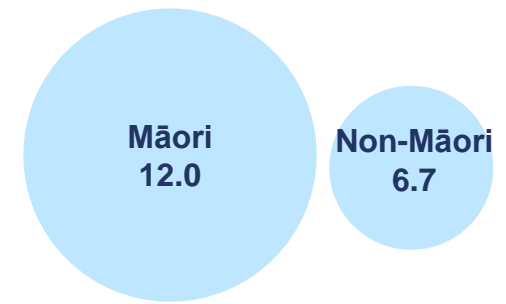
children 3-14 years had a borderline total difficulties score (7%)



Boys 1.5 times more likely to have a total difficulties score of concern

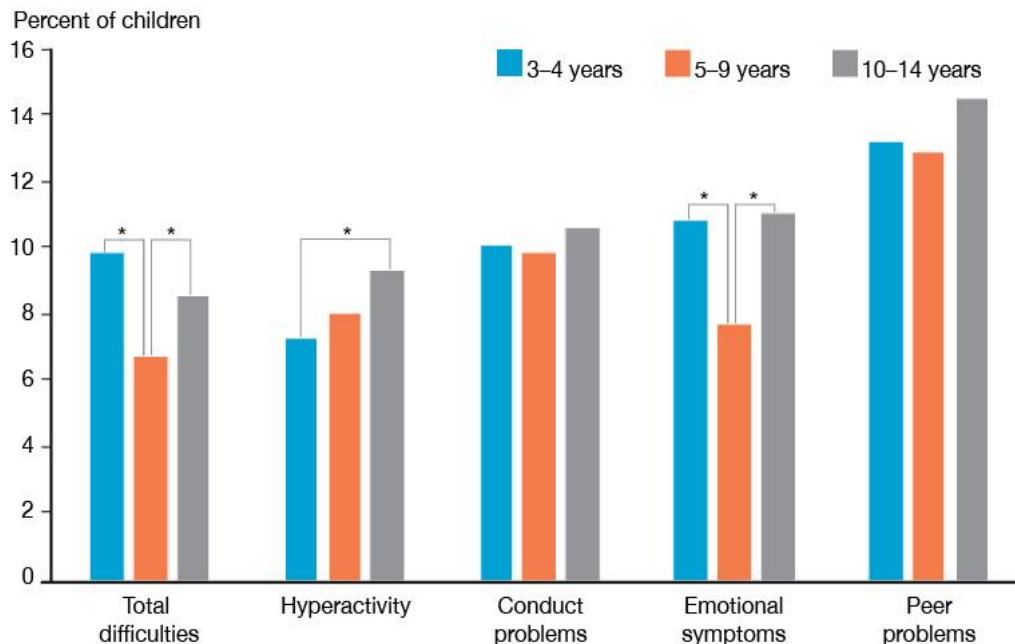


Most deprived 3 times more likely to have a total difficulties score of concern



Māori 1.8 times more likely to have a total difficulties score of concern

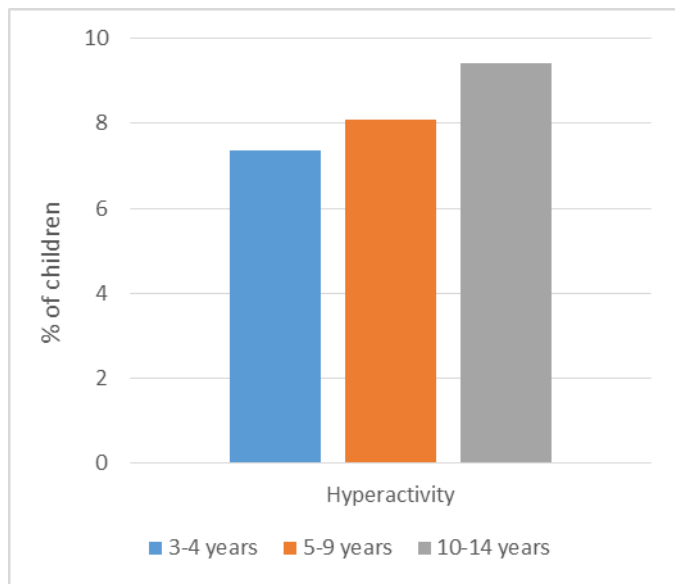
# Prevalence of difficulties increases with age



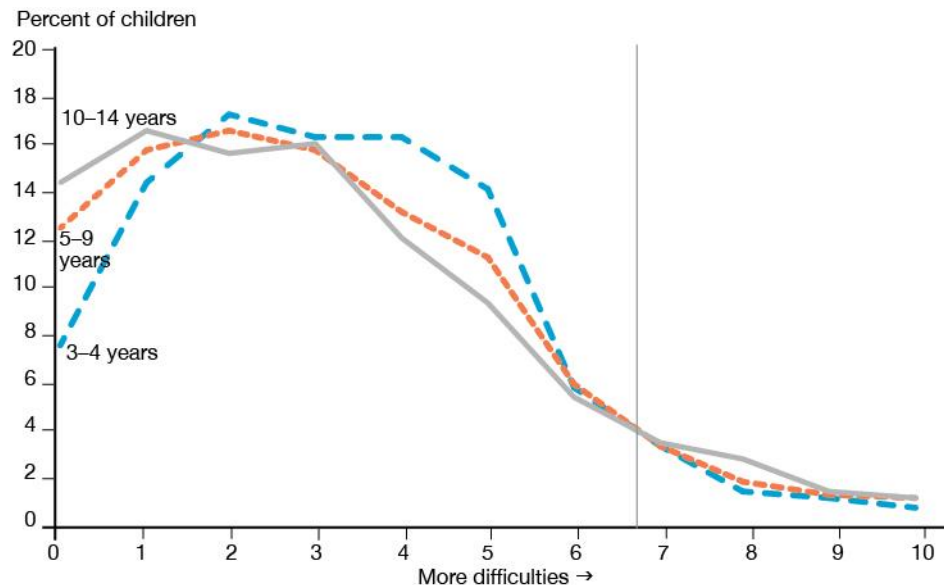
# The distribution of scores is important

- Prevalence of 'concerning' scores for hyperactivity goes up with age
- Mean score for hyperactivity subscale highest for 3-4 year olds
- Are those with a mid-range score on a path to more severe difficulties?

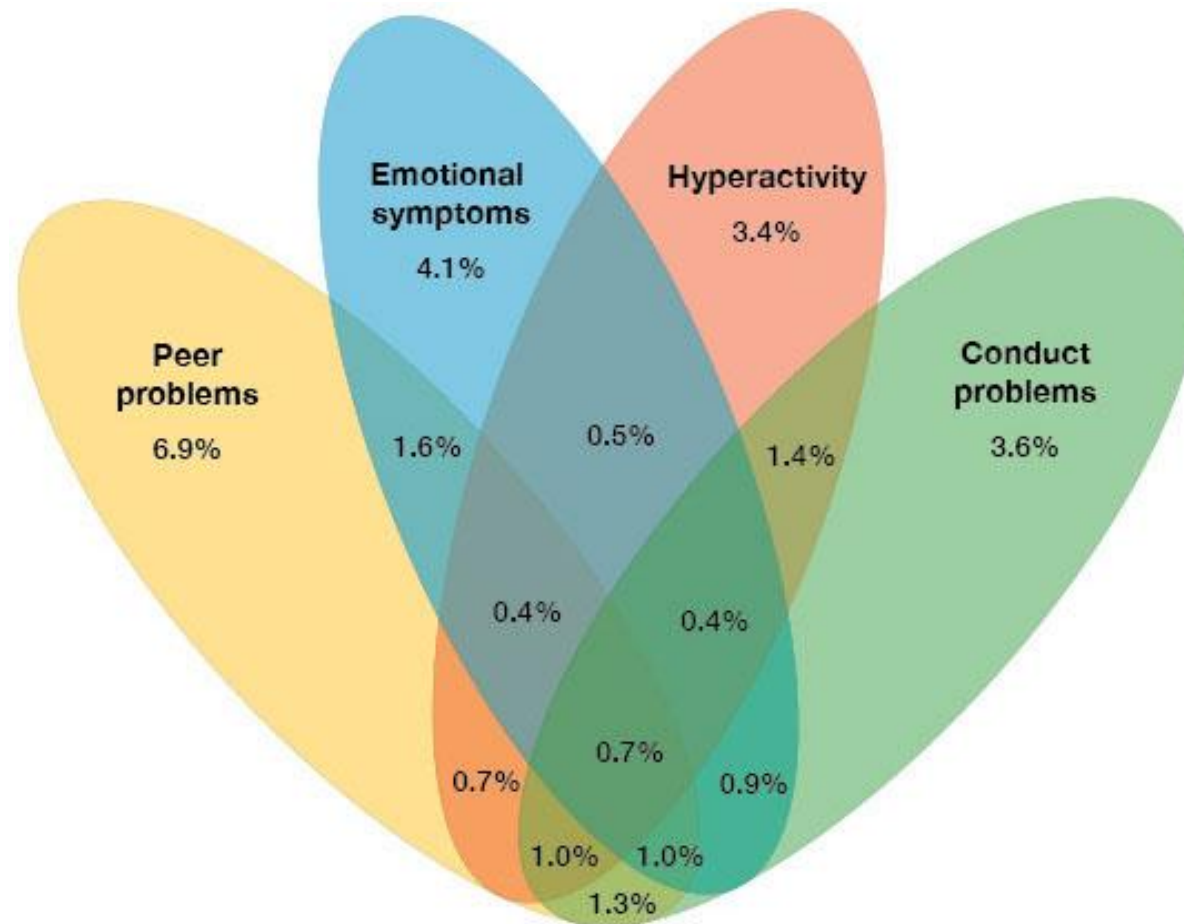
Share of children with 'concerning' hyperactivity score



Distribution of scores on the hyperactivity subscale by age group



# There is a lot of overlap between difficulties



**27.9% experienced difficulties in one or more areas**



# Difficulties are related to mental health and developmental disorders

Children with a total score of concern were more likely to have a diagnosed mental health or developmental disorder

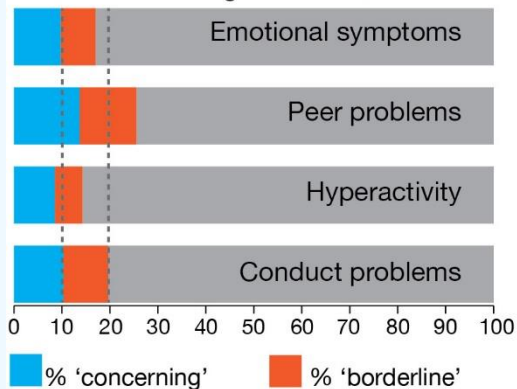
## Prevalence in children aged 5-14y

	Overall	with concerning SDQ	Adjusted Rate Ratio
Depression	0.8%	5.3%	12.1
Anxiety	3.1%	14.6%	7.1
ADHD	2.6%	22.0%	17.6
Autism	1.7%	11.4%	12.7

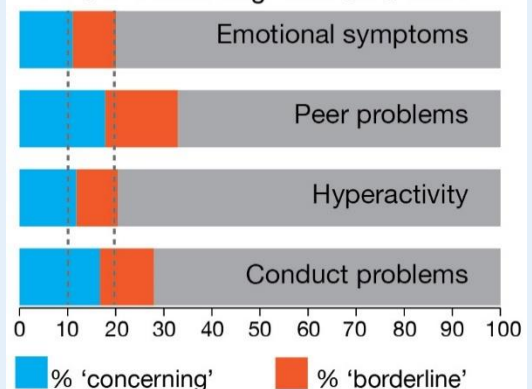
**Children aged 5-14y with concerning total SDQ score were 18x as likely to have doctor diagnosed ADHD**

# Rates & areas of concern differed by ethnicity

**8%** of New Zealand children had a 'concerning' total SDQ score



**12%** of Māori children had a 'concerning' total SDQ score

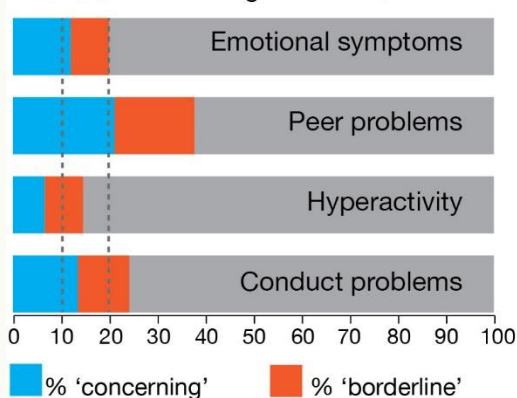


**Children aged 3-14**

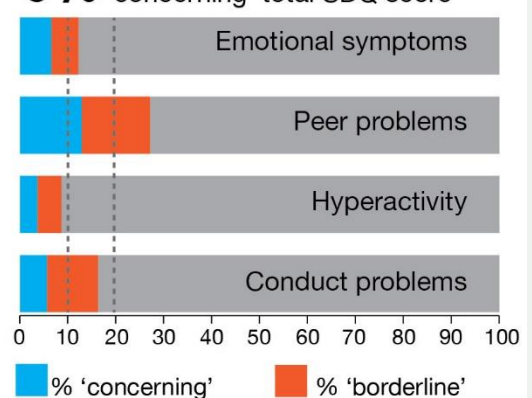
Thresholds to categorise scores as 'concerning' or 'borderline' were defined

based on a population-based UK survey, such that 10% fell in each group (Goodman, 1997)

**10%** of Pacific children had a 'concerning' total SDQ score

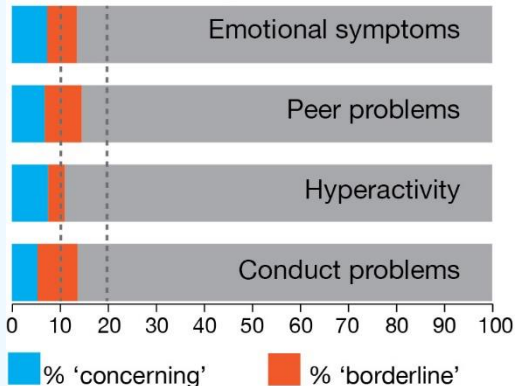


**5%** of Asian children had a 'concerning' total SDQ score

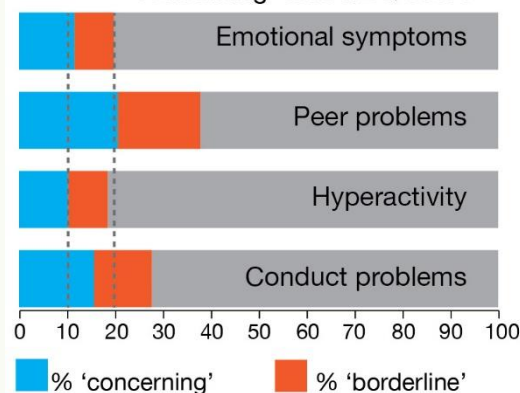


# Rates & areas of concern differed by deprivation

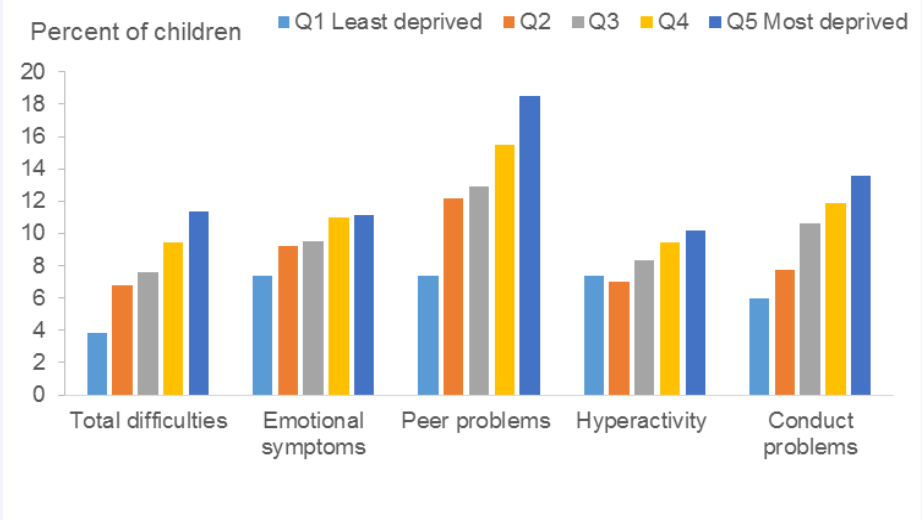
**4%** of children living in areas of low deprivation (quintile 1) had a 'concerning' total SDQ score



**12%** of children living in areas of high deprivation (quintile 5) had a 'concerning' total SDQ score

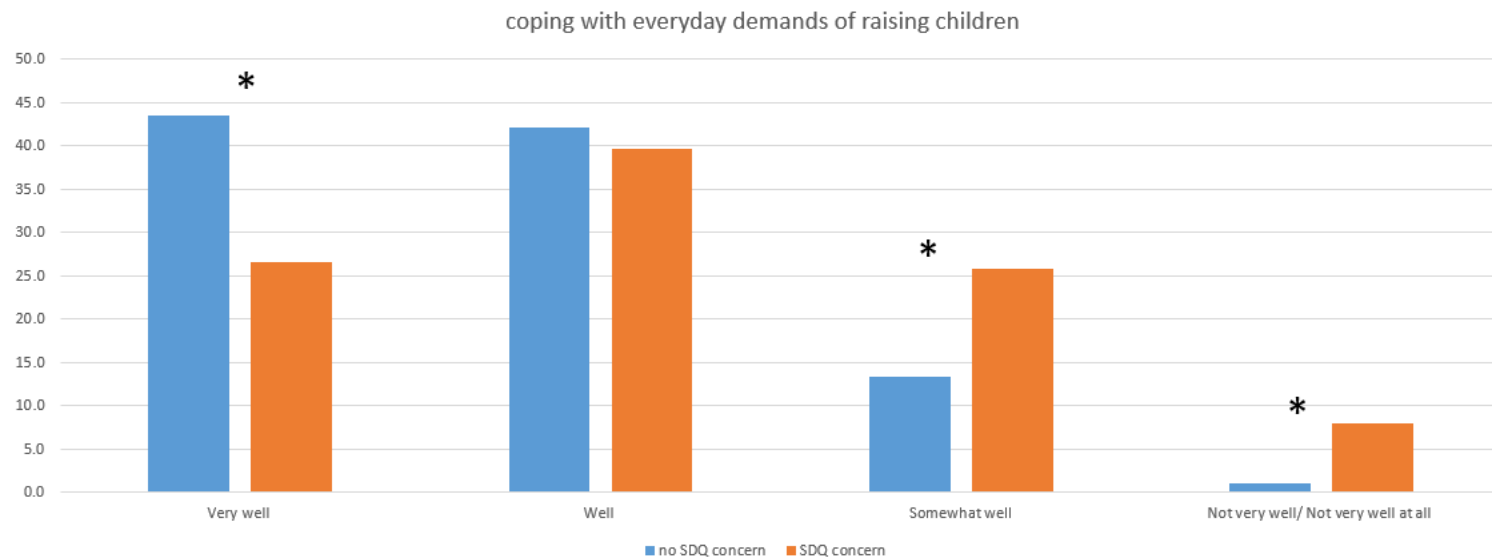


Prevalence of 'concerning' scores by deprivation quintile, age 3-14



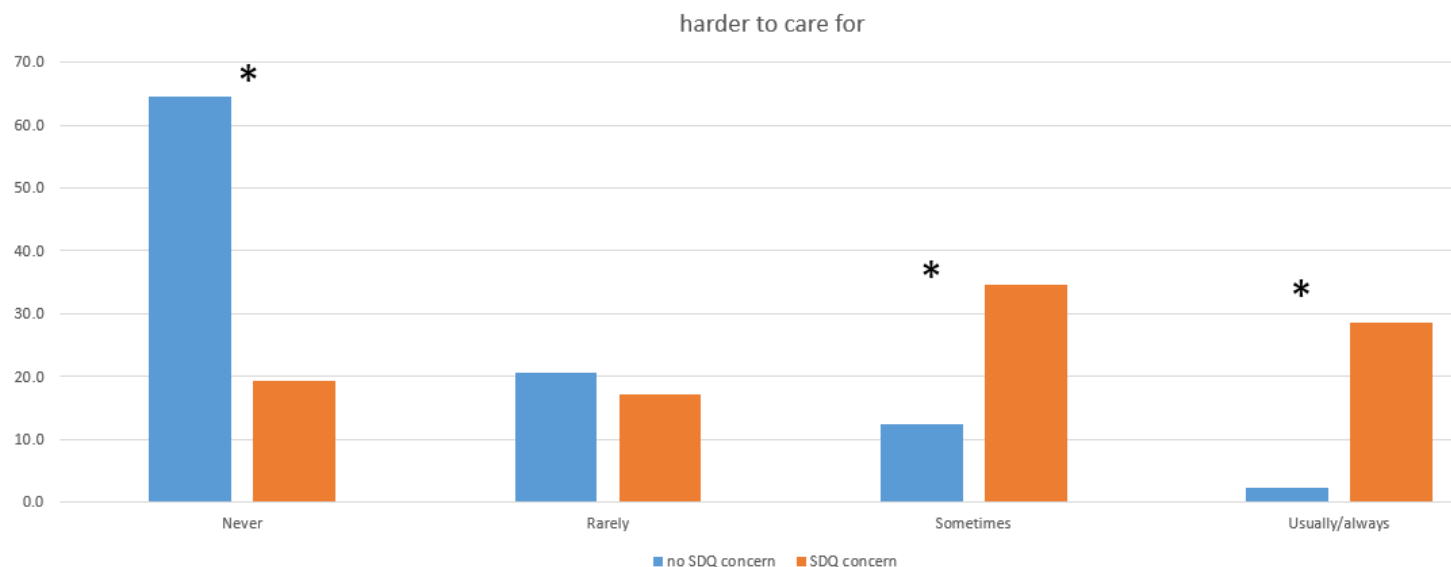
# Caregiver's perceptions by SDQ outcome

**In general, how well do you feel you are coping with the day to day demands of raising children?**



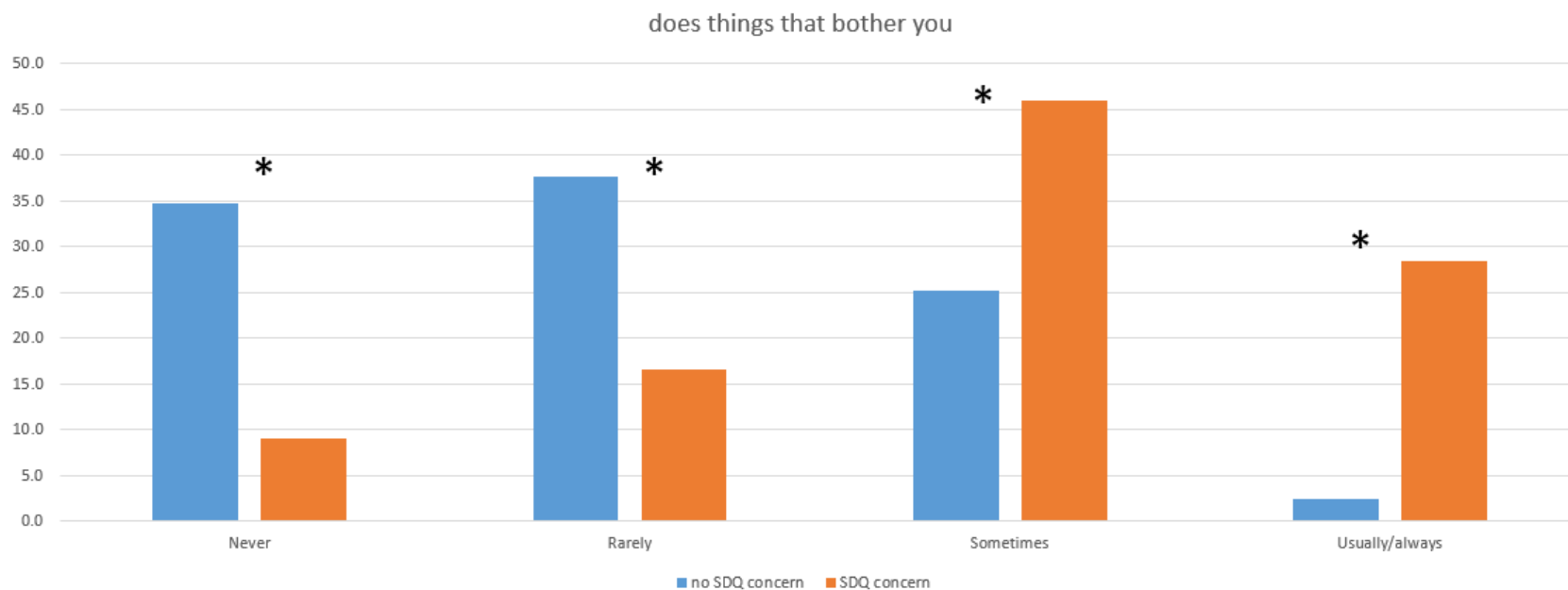
# Caregiver's perceptions by SDQ outcome

**During the past month, how often have you felt [Name] is much harder to care for than most children the same age?**



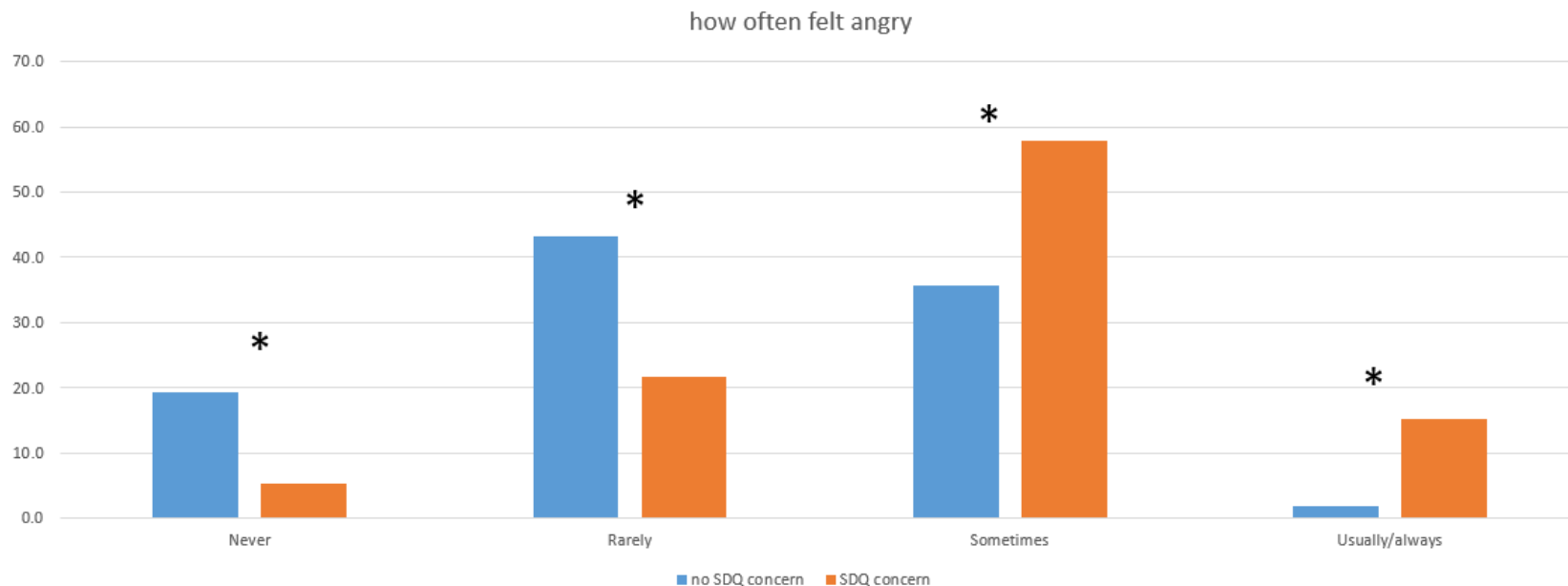
# Caregiver's perceptions by SDQ outcome

During the past month, how often have you felt [Name] does things that really bother you a lot?



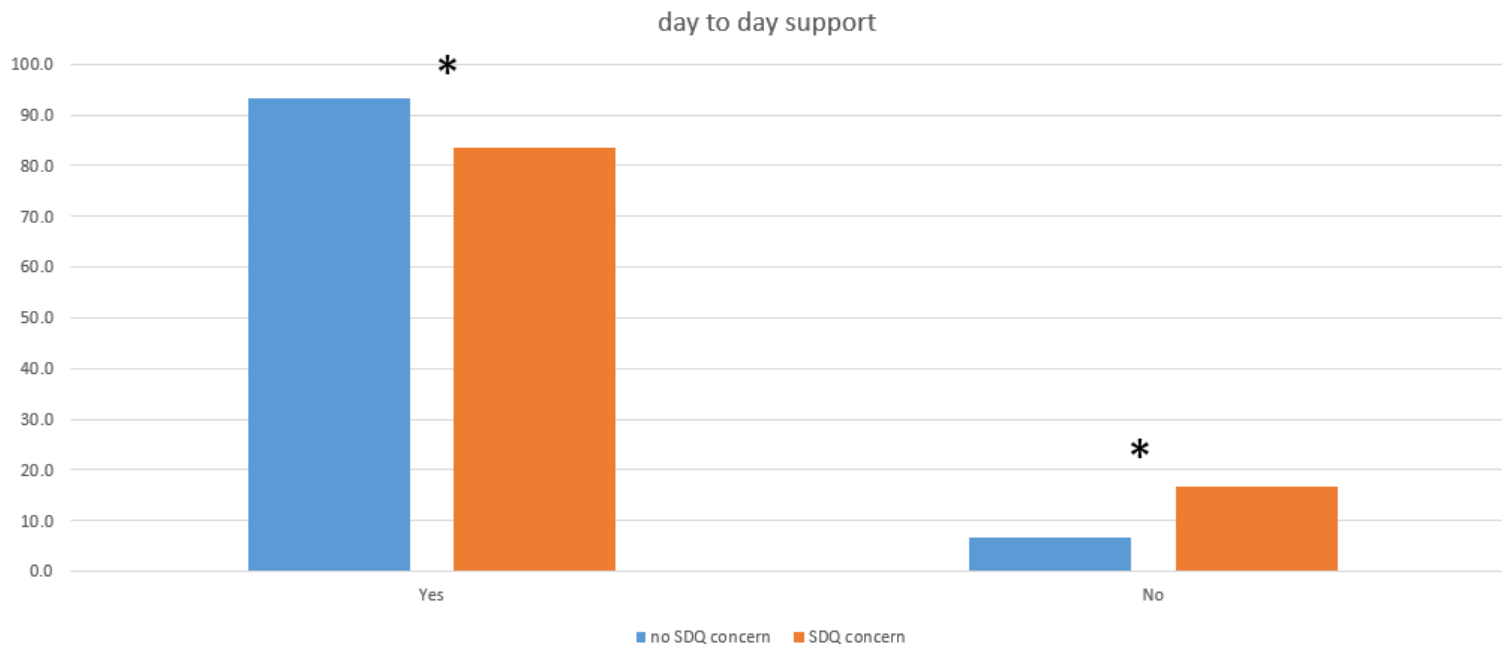
# Caregiver's perceptions by SDQ outcome

During the past month, how often have you felt angry with [Name]?



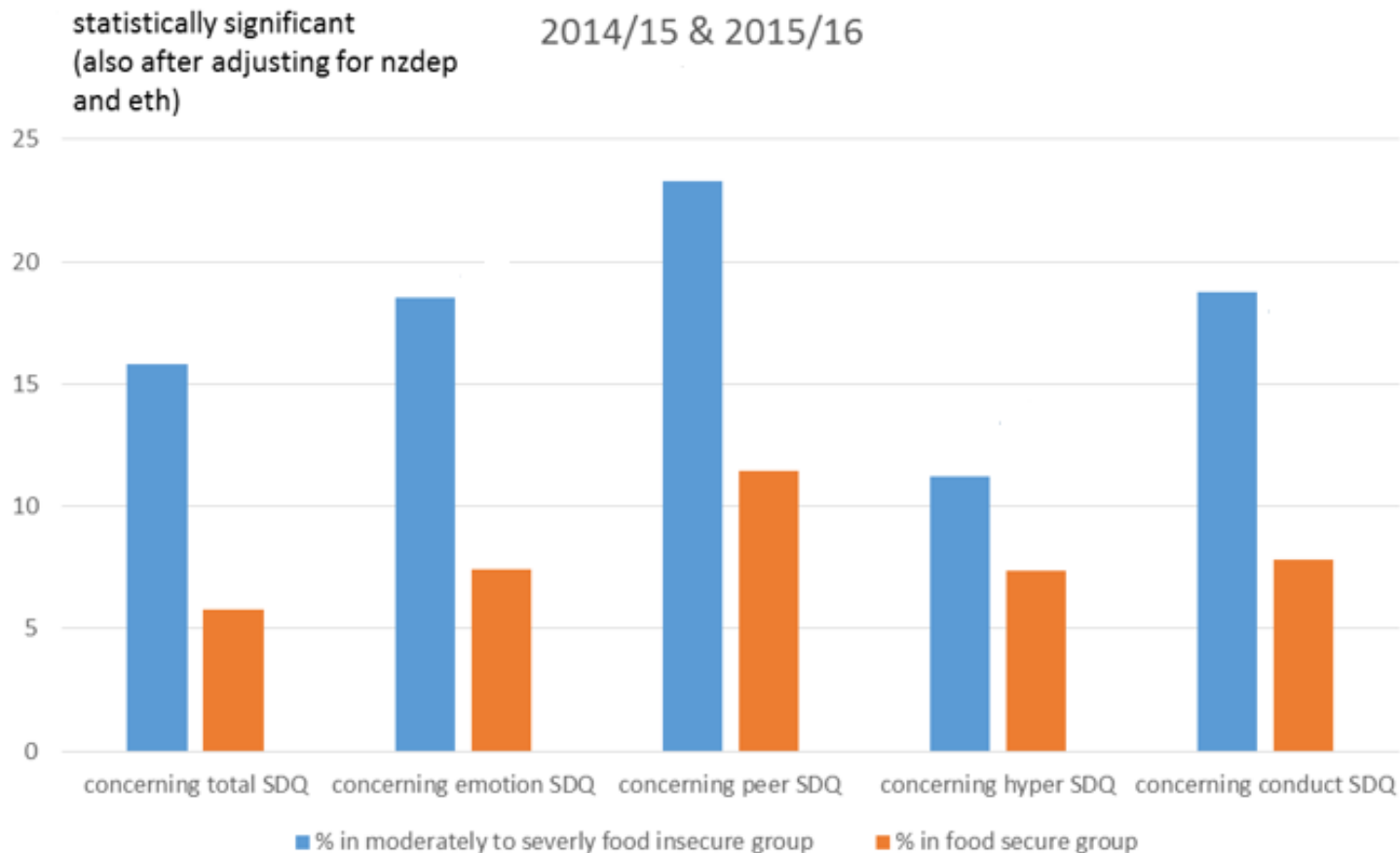
# Caregiver's perceptions by SDQ outcome

**Is there someone that you can turn to for day-to-day emotional support with raising children? This can be any person, including your husband or wife or partner.**





# Household food security and SDQ



# Data (for reference)

**Table 1: Estimated prevalence of 'concerning' total difficulties scores on SDQ**

Characteristics	Percentage of 'concerning' total difficulties scores (95% CI)			
	Total	Boys	Girls	Estimated number of children
<b>Total sample</b>	8.0 (7.4–8.7)	9.4 (8.3–10.6)	6.6 (5.7–7.5)	57,000 (52,000–62,000)
<b>Age (years)</b>				
3–4	10.2 (8.3–12.0)	11.4 (8.6–14.1)	9.0 (6.3–11.7)	12,000 (9,000–14,000)
5–9	6.9 (6.0–7.8)	8.0 (6.7–9.3)	5.7 (4.5–6.9)	21,000 (18,000–24,000)
10–14	8.4 (7.2–9.6)	10.3 (8.4–12.2)	6.5 (5.1–7.8)	24,000 (21,000–28,000)
<b>Ethnicity</b>				
Māori	12.0 (10.5–13.4)	13.7 (11.6–15.9)	10.1 (8.2–12.0)	22,000 (19,000–24,000)
Pacific	10.0 (8.0–12.0)	11.9 (9.2–14.6)	8.0 (5.5–10.5)	9,000 (7,000–11,000)
Asian	4.9 (3.4–6.3)	5.9 (3.5–8.3)	n<30	4,000 (3,000–5,000)
European/other	7.5 (6.7–8.3)	8.8 (7.5–10.2)	6.0 (4.9–7.1)	38,000 (34,000–43,000)
<b>Deprivation</b>				
Quintile 1 (least deprived areas)	3.7 (2.3–5.0)	4.0 (2.2–5.9)	3.2 (1.2–5.3)	5,000 (3,000–7,000)
Quintile 2	6.5 (4.7–8.3)	7.7 (4.8–9.4)	5.2 (3.0–7.5)	9,000 (7,000–12,000)
Quintile 3	7.4 (5.7–9.1)	8.7 (6.1–11.3)	6.0 (4.3–7.8)	10,000 (8,000–12,000)
Quintile 4	9.6 (7.9–11.3)	11.5 (8.8–14.2)	7.6 (5.6–9.6)	13,000 (10,000–15,000)
Quintile 5 (most deprived areas)	12.4 (10.8–13.9)	14.8 (12.3–17.3)	10.0 (8.1–11.8)	20,000 (18,000–23,000)

Note. Thresholds for children aged 3–4 years olds are different from those for children aged 5 years and over.

# Data (for reference)

**Table 2: Estimated prevalence of ‘concerning’ scores on SDQ**

Characteristics	Percentage of ‘concerning’ scores (95% CI)			
	Emotional symptoms	Peer problems	Hyperactivity	Conduct problems
<b>Total sample</b>	9.7 (8.9–10.4)	13.7 (12.7–14.6)	8.5 (7.8–9.2)	10.3 (9.5–11.1)
<b>Age (years)</b>				
3–4	11.1 (8.9–13.3)*	13.8 (11.7–15.9)	7.3 (5.8–8.9)	10.5 (8.7–12.3)*
5–9	7.8 (6.8–8.9)	13.1 (11.8–14.4)	8.2 (7.2–9.1)	10.1 (8.9–11.2)
10–14	11.1 (9.7–12.4)	14.2 (13.0–15.4)	9.4 (8.0–10.8)	10.4 (9.1–11.8)
<b>Sex</b>				
Boys	8.5 (7.4–9.7)	15.0 (13.7–16.3)	11.5 (10.3–12.6)	11.6 (10.4–12.8)
Girls	10.9 (9.7–12.1)	12.2 (11.1–13.4)	5.4 (4.7–6.2)	8.9 (7.9–9.9)
<b>Ethnicity</b>				
Māori	11.0 (9.6–12.3)	17.8 (15.9–19.7)	11.8 (10.4–13.3)	16.7 (14.8–18.6)
Pacific	12.0 (9.9–14.0)	21.1 (18.6–23.7)	6.6 (5.2–8.1)	13.5 (11.4–15.7)
Asian	6.5 (4.8–8.2)	12.9 (10.4–15.4)	3.6 (2.5–4.7)	5.6 (3.9–7.3)
European/other	9.7 (8.7–10.6)	11.4 (10.4–12.4)	8.7 (7.7–9.6)	9.3 (8.3–10.2)
<b>Deprivation</b>				
Quintile 1 (least deprived areas)	7.3 (5.2–9.5)	6.8 (4.9–8.6)	7.5 (5.3–9.6)	5.3 (3.6–7.0)
Quintile 2	8.9 (7.0–10.9)	11.5 (9.6–13.3)	6.9 (5.3–8.6)	7.1 (5.4–8.8)
Quintile 3	9.3 (7.6–11.0)	12.4 (10.3–14.5)	8.4 (6.9–9.9)	10.3 (8.3–12.2)
Quintile 4	11.0 (9.5–12.6)	16.0 (14.0–18.0)	9.4 (7.8–11.0)	12.2 (10.1–14.3)
Quintile 5 (most deprived areas)	11.5 (10.2–12.9)	20.6 (18.7–22.4)	10.2 (8.6–11.8)	16.0 (13.5–17.7)

\* Thresholds for children aged 3–4 years olds are different from those for children aged 5 years and over.

# Data (for reference)

**Table 5: Mean SDQ scores by age group**

Age (years)	Mean score (95% CI)				
	Total difficulties	Emotional symptoms	Peer problems	Hyperactivity	Conduct problems
3–4	8.38 (8.09–8.66)	1.40 (1.31–1.49)	1.63 (1.54–1.72)	3.29 (3.17–3.42)	2.06 (1.95–2.16)
5–9	7.65 (7.46–7.85)	1.57 (1.50–1.64)	1.55 (1.49–1.62)	3.09 (3.00–3.18)	1.44 (1.38–1.49)
10–14	8.02 (7.80–8.23)	1.92 (1.84–2.00)	1.70 (1.63–1.77)	3.02 (2.92–3.12)	1.38 (1.31–1.44)

Note: Estimates are unadjusted.