



## Acknowledgement of Country

Tresillian acknowledges Aboriginal and Torres Strait Islander people as the First Peoples of Australia. We acknowledge the Traditional Owners and Custodians of land on the countries on which we live and work and their unique spiritual relationships to the lands and seas. We pay respect to Aboriginal and Torres Strait Islander Elders, past and present, and acknowledge all the Aboriginal and Torres Strait Islander people living in the communities we serve.

# This section will cover

- What we learned about the CCQ from the first research study
  - ✓ Overview of study
  - ✓ CCQ reliability
  - ✓ CCQ validity
  - ✓ Estimating clinical concern
- Case study: CCQ in clinical practice

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ORIGINAL PAPER



## Examining the Effectiveness of Circle of Security Parenting (COS-P): A Multi-Site Non-Randomized Study with Waitlist Control

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### Abstract

Recognition of the protective value of secure parent–child relationships has prompted a growing interest in parenting interventions informed by attachment theory. Circle of Security Parenting (COS-P) is one such program, specifically designed for scalability. Although widely disseminated internationally, evidence for the effectiveness of COS-P is very limited. This non-randomized controlled effectiveness study was designed to help address this gap. A sample of 256 parents of children aged 0–6 years was recruited from four community child and family health organizations. Assessments were undertaken pre- and post-intervention for the treatment group ( $n = 201$ ) and at comparable times for the waitlist control group ( $n = 55$ ). Analysis of data for mothers (89% of sample) revealed a significant Time x Group interaction for six of the seven outcomes examined. Compared to mothers in the control condition, treatment group mothers reported significantly: (a) improved parental mentalizing and self-efficacy regarding empathy and affection toward the child; (b) reduced caregiving helplessness and hostility toward the child; and (c) reduced depression symptoms, at the end of COS-P treatment. There was no difference between groups for change in perceived child difficultness. Within-treatment-group analyses indicated that mothers with older children reported greatest reductions in caregiving helplessness, and mothers with probable clinical depression pre-intervention reported greatest reductions in hostility and depression symptoms. Improvements in other study outcomes did not differ by depression severity or child age. Exploratory analyses indicated that treatment group fathers showed the same pattern of change as mothers. Clinical implications and directions for future research are discussed.

**Keywords** Circle of Security · Parenting self-efficacy · Parental mentalizing · Parental depression

### Highlights

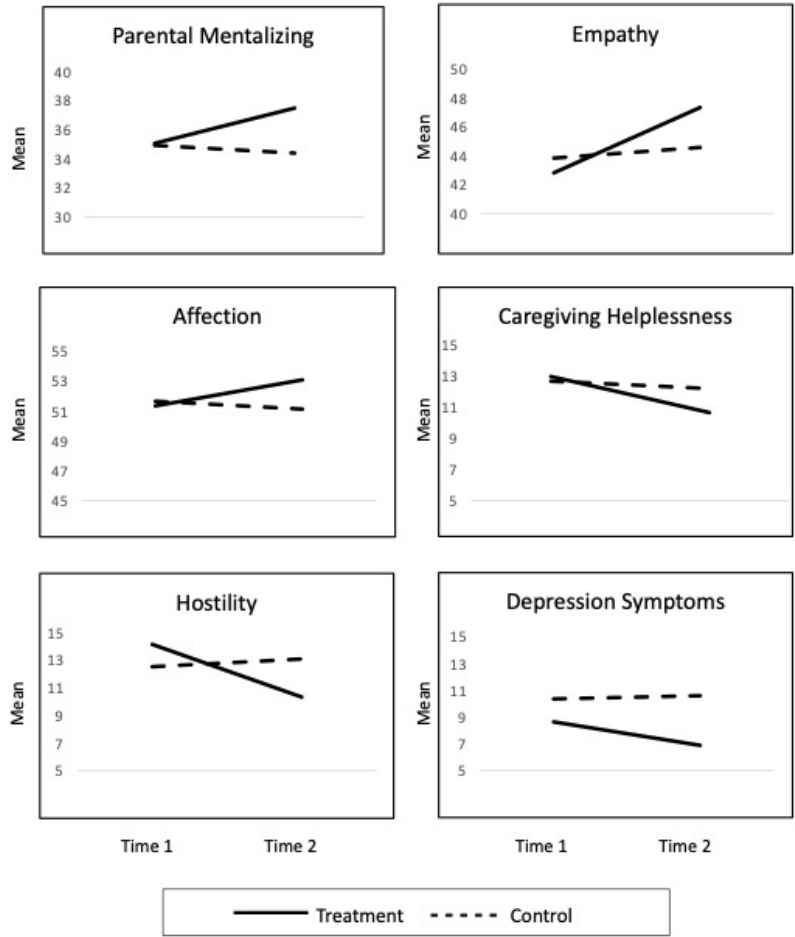
- This is one of few studies of the popular COS-P intervention that includes a control condition.
- Parents receiving COS-P reported greater improvements than control group parents.

# First CCQ study: 2017-2020

- Evaluation of Circle of Security Parenting program (COSP)
- 256 participants across 4 organisations – intervention and control groups
- Parents with early parenting difficulties – high rates of PND
- Children aged 0-72 months



# Study results in brief



Reproduced from Maxwell et al., 2021



# Validity and reliability

**Two important questions:**

1. Does it measure what it is supposed to measure?

**VALIDITY**

2. Does it measure with consistency? (i.e., Is it free from random error?)

**RELIABILITY**

# CCQ reliability

- Internal consistency – Chronbach alpha

| Chronbach alpha value | Acceptability        |
|-----------------------|----------------------|
| <.60                  | Unacceptable         |
| .60 - .65             | Undesirable          |
| .65 - .70             | Minimally acceptable |
| .70 - .80             | Respectable          |
| .80 - .90             | Very good            |

De Vellis 2012

- From Time 1 data for 265 participants

|                                |     |
|--------------------------------|-----|
| Self-efficacy: Empathy (A1-6)  | .87 |
| Self-efficacy: Emotion (A7-12) | .75 |
| Parent hostility (B1-5)        | .89 |
| Caregiving helplessness (C1-7) | .86 |
| Parental mentalising (D1-18)   | .81 |

# CCQ validity

Correlations among CCQ subscales and EPDS

|              | Empathy       | Emotion       | Hostility    | Helplessness | Mentalising |
|--------------|---------------|---------------|--------------|--------------|-------------|
| Emotion      | <b>.66**</b>  |               |              |              |             |
| Hostility    | <b>-.40**</b> | <b>-.38**</b> |              |              |             |
| Helplessness | <b>-.57**</b> | <b>-.50**</b> | <b>.56**</b> |              |             |
| Mentalising  | <b>.45**</b>  | <b>.30**</b>  | -.11         | <b>-.16*</b> |             |
| Depression   | <b>-.24**</b> | <b>-.20**</b> | <b>.32**</b> | <b>.45**</b> | .05         |

\* Correlation is significant at the 0.05 level

\*\* Correlation is significant at the 0.01 level

# CCQ validity

Correlations among CCQ subscales and caregiving representations from narrative interview (67 mothers)

| COSI →       | Kind/<br>Supportive | Authoritative | Unavailable   | Harsh/<br>Punitive | Hostile       |
|--------------|---------------------|---------------|---------------|--------------------|---------------|
| ↓ CCQ        |                     |               |               |                    |               |
| Empathy      | <b>.26*</b>         | <b>.28*</b>   | <b>-.36**</b> | -.04               | <b>-.38**</b> |
| Emotion      | .21                 | .20           | -.23          | .09                | <b>-.24*</b>  |
| Hostility    | <b>-.35**</b>       | -.05          | .20           | <b>.43**</b>       | <b>.34**</b>  |
| Helplessness | -.21                | -.05          | .13           | -.00               | <b>.28*</b>   |
| Mentalising  | .10                 | .16           | -.21          | .07                | <b>-.32**</b> |

\* Correlation is significant at the 0.05 level

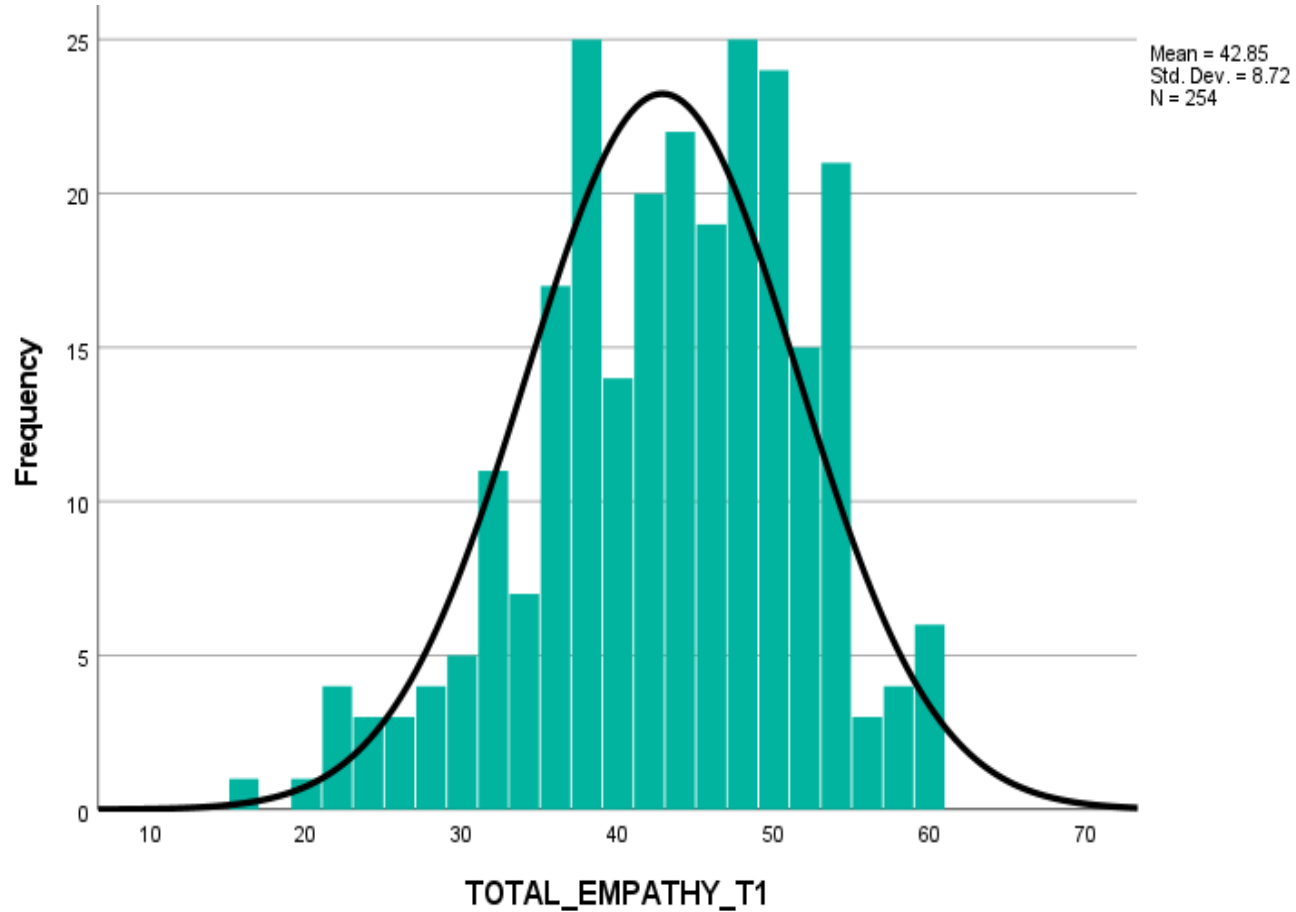
\*\* Correlation is significant at the 0.01 level



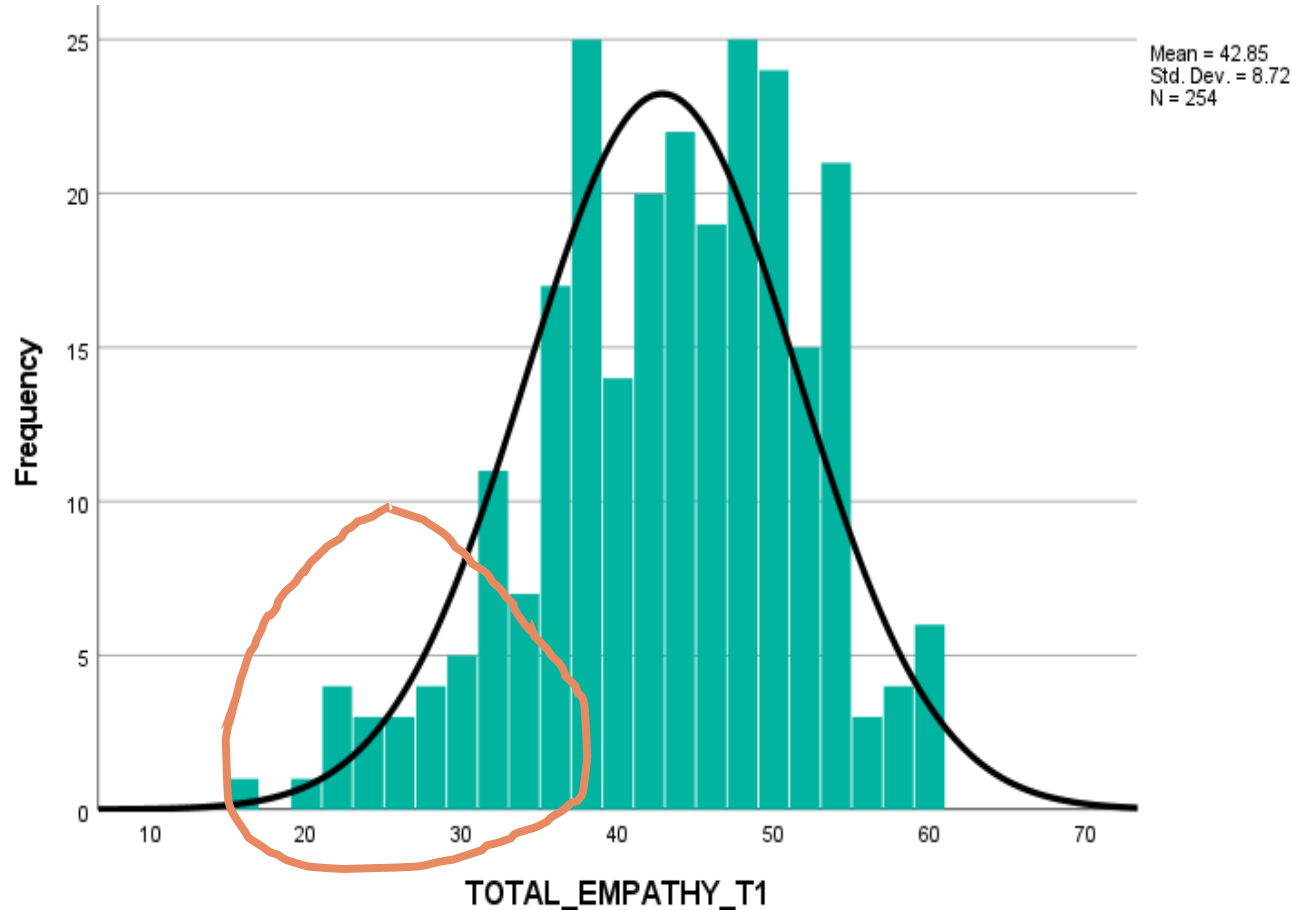
# Determining clinical concern

| Scale                          | Questions | Range |
|--------------------------------|-----------|-------|
| <b>Self-efficacy: Empathy</b>  | A1-6      | 0-60  |
| <b>Self-efficacy: Emotion</b>  | A7-12     | 0-60  |
| <b>Parent hostility</b>        | B1-5      | 0-50  |
| <b>Caregiving helplessness</b> | C1-7      | 7-35  |
| <b>Parental mentalising</b>    | D1-18     | 0-54  |

# Range of scores: Empathy



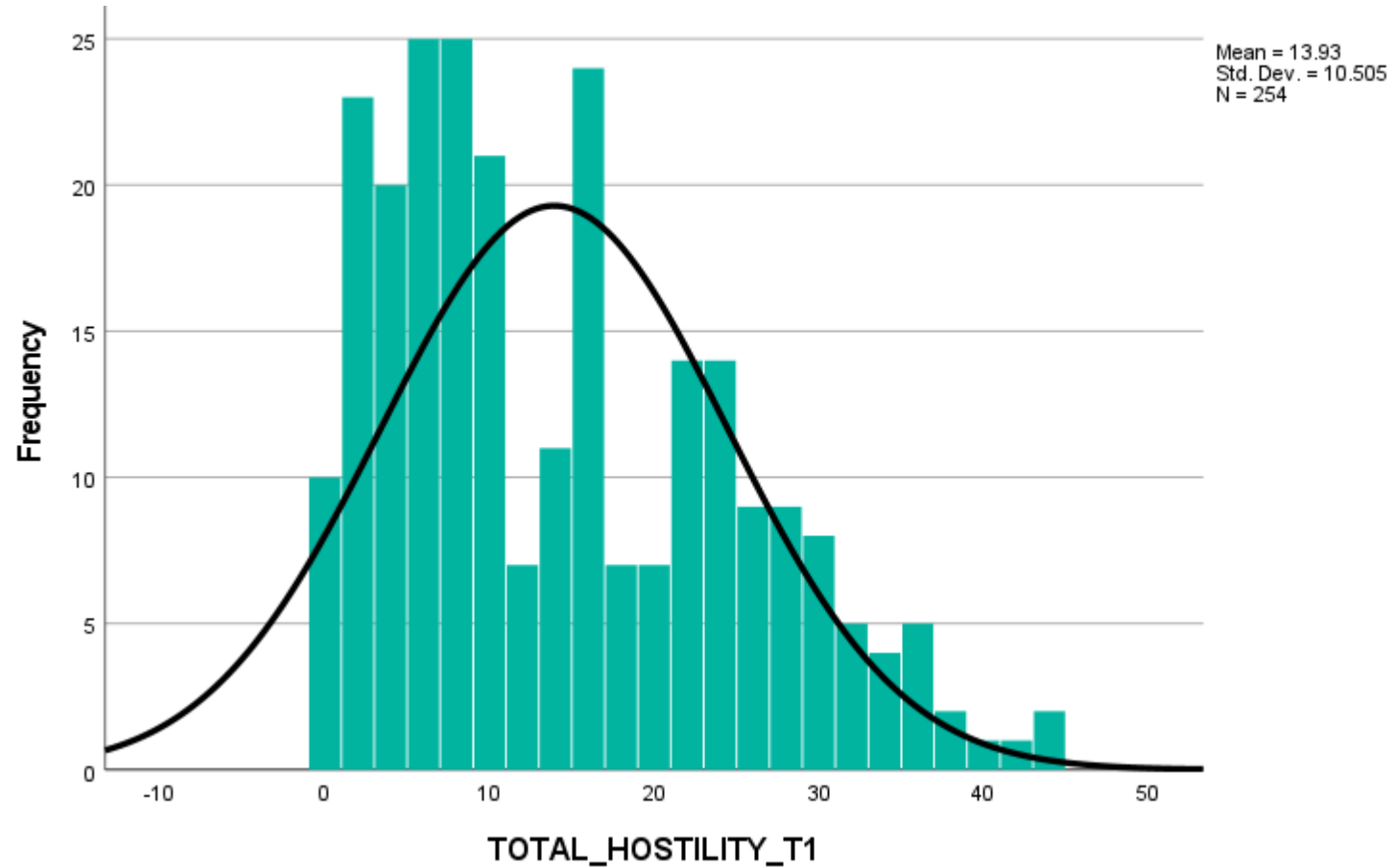
# Determining possible clinical concern



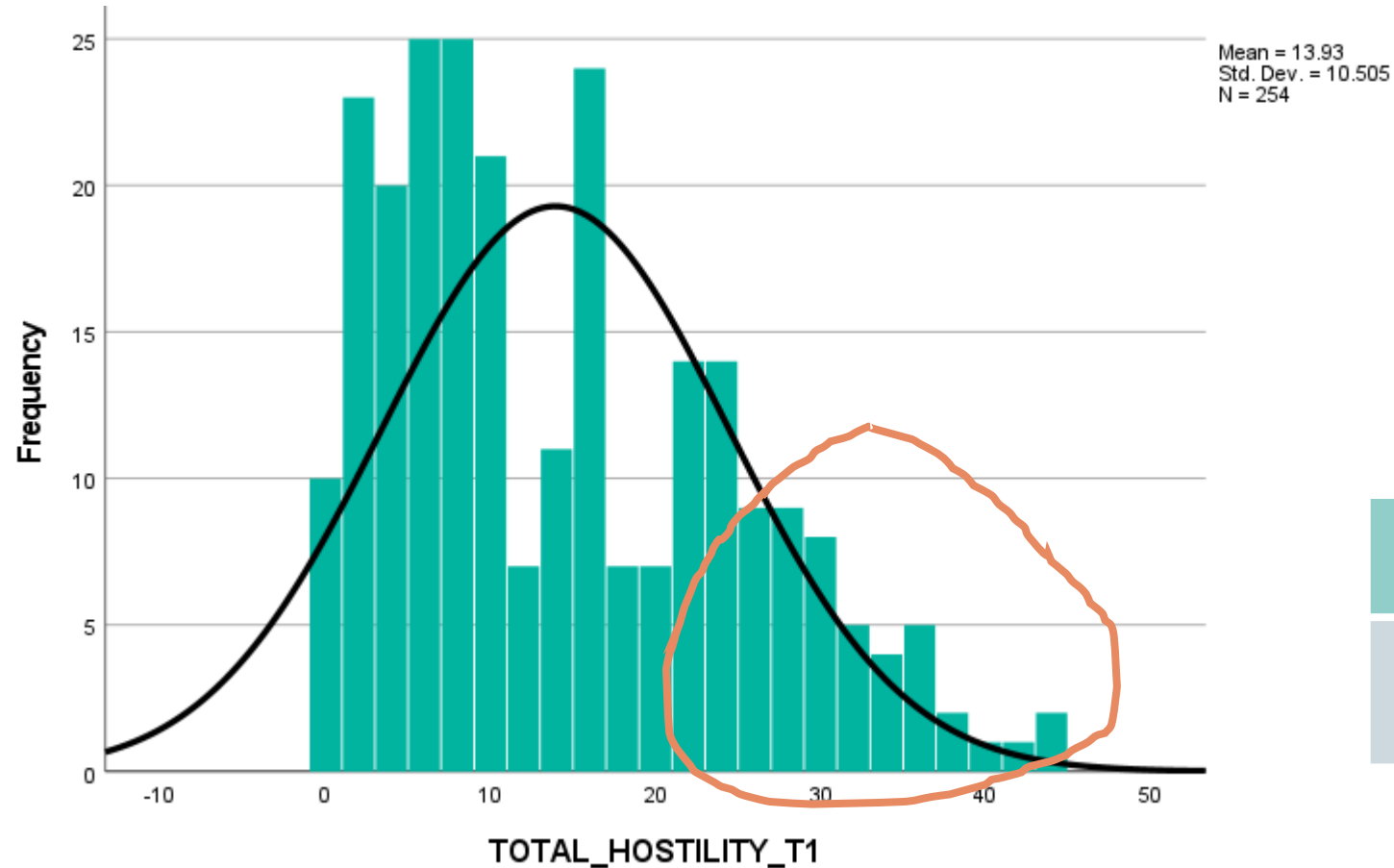
**Clinical concern**

**Below 38**

# Range of scores: Hostility



# Determining possible clinical concern



# Determining possible clinical concern

| Scale                          | Questions | Range | Possible clinical concern |
|--------------------------------|-----------|-------|---------------------------|
| <b>Self-efficacy: Empathy</b>  | A1-6      | 0-60  | <b>Below 38</b>           |
| <b>Self-efficacy: Emotion</b>  | A7-12     | 0-60  | <b>Below 47</b>           |
| <b>Parent hostility</b>        | B1-5      | 0-50  | <b>Above 21</b>           |
| <b>Caregiving helplessness</b> | C1-7      | 7-35  | <b>Above 16</b>           |
| <b>Parental mentalising</b>    | D1-18     | 0-54  | <b>Below 31</b>           |

# Case study

Mother of 12-month-old girl

| Scale                          | Range | Score |
|--------------------------------|-------|-------|
| Self-efficacy: Empathy (A1-6)  | 0-60  | 50    |
| Self-efficacy: Emotion (A7-12) | 0-60  | 46    |
| Parent hostility (B1-5)        | 0-50  | 26    |
| Caregiving helplessness (C1-7) | 7-35  | 19    |
| Parental mentalising (D1-18)   | 0-54  | 37    |

# Case study

Mother of 12-month-old girl

| Scale                          | Range | Score | Possible clinical concern |
|--------------------------------|-------|-------|---------------------------|
| Self-efficacy: Empathy (A1-6)  | 0-60  | 50    | Below 38                  |
| Self-efficacy: Emotion (A7-12) | 0-60  | 46    | Below 47                  |
| Parent hostility (B1-5)        | 0-50  | 26    | Above 21                  |
| Caregiving helplessness (C1-7) | 7-35  | 19    | Above 16                  |
| Parental mentalising (D1-18)   | 0-54  | 37    | Below 31                  |



# Case study

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|--------------------------------|-------|-----------|---------------------------|
| Self-efficacy: Empathy (A1-6)  | 0-60  | 50        | Below 38                  |
| Self-efficacy: Emotion (A7-12) | 0-60  | <b>46</b> | Below 47                  |
| Parent hostility (B1-5)        | 0-50  | <b>26</b> | Above 21                  |
| Caregiving helplessness (C1-7) | 7-35  | <b>19</b> | Above 16                  |
| Parental mentalising (D1-18)   | 0-54  | 37        | Below 31                  |

# Case study

Mother of 12-month-old girl

## Results

|                         | Raw Score | Percentile | Clinical Concern? |
|-------------------------|-----------|------------|-------------------|
| Empathy & Understanding | 50        | 50         |                   |
| Emotion & Affection     | 46        | 19.2       | Yes               |
| <b>Hostility</b>        | 26        | 87         | Yes               |
| Caregiving Helplessness | 19        | 95         | Yes               |
| Parental Mentalising    | 37        | 45         |                   |

# Case study



(0 = Not at all 10 = All the time)

|    |  |   |   |   |   |   |   |   |   |   |   |    |
|----|--|---|---|---|---|---|---|---|---|---|---|----|
| 18 | When this child cries, he/she gets on my nerves. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|--|---|---|---|---|---|---|---|---|---|---|----|

↓ Q21: When I am with my child, I often feel out of control

|    |   |                        |   |                   |   |                  |
|----|---|------------------------|---|-------------------|---|------------------|
|    |   | 1 - Not at all like us | 2 | 3 - A bit like us | 4 | Very like us - 5 |
| 21 | <p>These questions explore how it feels to be a caregiver and, more specifically, how it feels when you and your child are together. The statements describe how some caregivers feel about their relationship with their child. Read each statement carefully and select the option that most clearly reflects your relationship with your child.</p> <p>When I am with my child, I often feel out of control.</p> | 1                      | 2 | 3                 | 4 | 5                |

# Case study

Mother of 12-month-old girl

| Scale                          | Score |    | Possible clinical concern |
|--------------------------------|-------|----|---------------------------|
|                                | T1    | T2 |                           |
| Self-efficacy: Empathy (A1-6)  | 50    | 50 | Below 38                  |
| Self-efficacy: Emotion (A7-12) | 46    | 58 | Below 47                  |
| Parent hostility (B1-5)        | 26    | 24 | Above 21                  |
| Caregiving helplessness (C1-7) | 19    | 13 | Above 16                  |
| Parental mentalising (D1-18)   | 37    | 49 | Below 31                  |



# Using the CCQ in clinical practice