

The Development of Empathic Responding During Early Childhood (3-6 Years): Evidence from a Behavioural Comforting Task.

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Introduction

Why is empathy important?

- Empathy is the “ability to share and understand others’ emotional states” (1).
- It involves both **affective** and **cognitive** components (2).
- It is associated with **prosocial** behaviours, such as **helping** and **comforting** (3).
- Early childhood is a key period for the development of complex empathic and prosocial behaviours.

What do we know?

- Empathic responding has been observed from infancy.
- Behavioural responses to other’s distress become more sophisticated with development.
- Comforting frequency increases from 9 months to 18 months (4).

Hypotheses:

- Older children are more likely to engage in comforting.
- Older children will have high comforting and concern scores.
- The frequency and range of comforting will vary with age.

Aim: To investigate whether age is associated with children’s comforting responses when a caregiver simulates distress.

References: 1 Vreden et al. (2025), 2 Preston & de Waal (2002), Singer & Klimecki (2014), 4 Vreden et al. (2025).

Methods

Participants:

- **N = 43 recruited; 31 analysed**
- Ages: **3 – 6 years**
→ *Mean* = 4.71 years; *SD* = 1.07
- 12 participants excluded due to incomplete/invalid trials

Design:

- **Observational design**
- **Predictor:** Age in months
- **Outcomes:**
 - Comforting Score
 - Concern Score

Comforting Task:



1. Warm up
- ↓
2. Caregiver simulates minor injury
- ↓
3. Child’s response recorded
- ↓
4. Child answers 5 questions
- ↓
5. Responses coded using standardised protocol

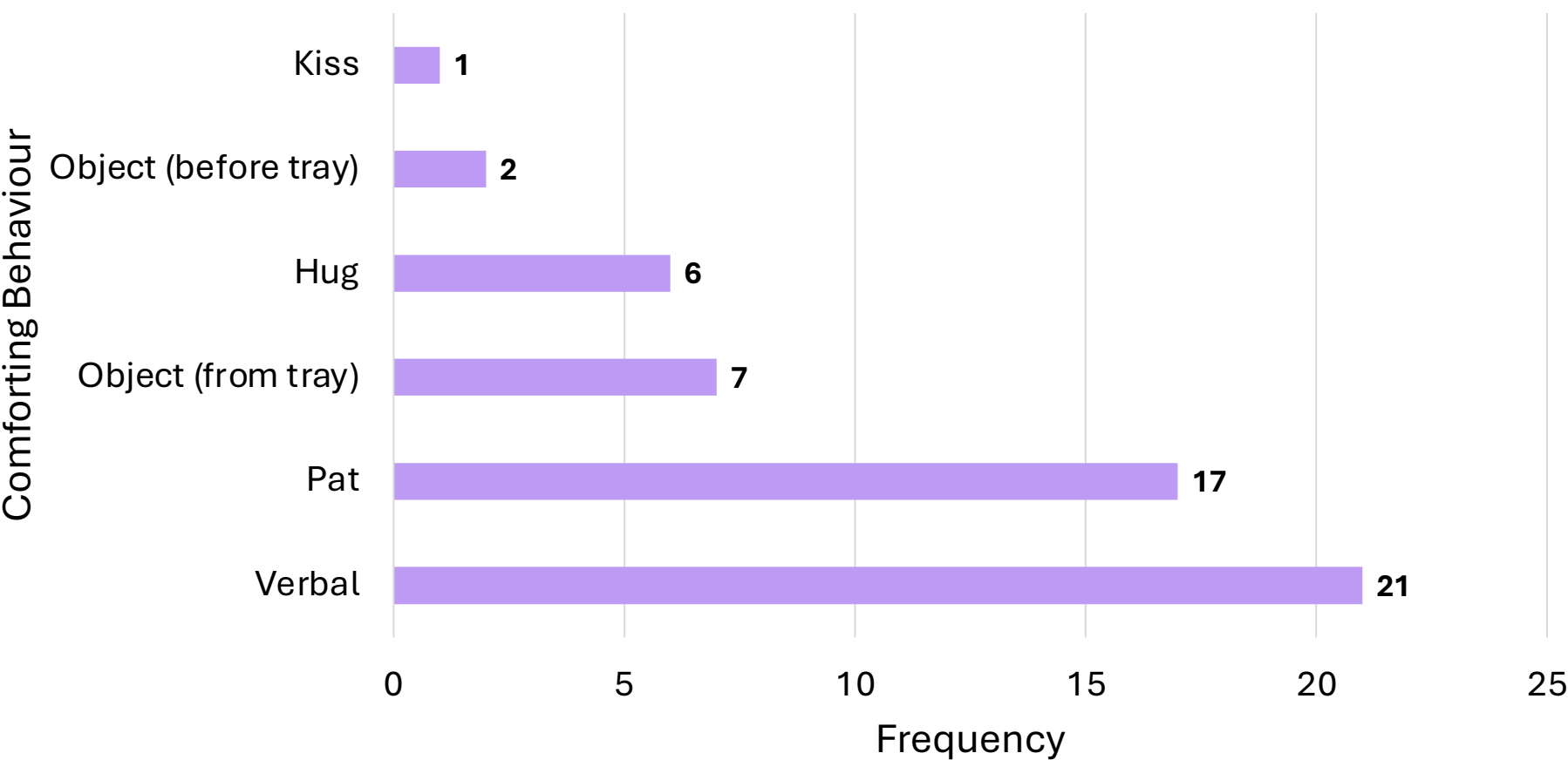
Coding:

- Video-coded behavioural responses
- Latency to first comforting recorded
- Verbal responses coded
- Comforting behaviours:
 - Patting
 - Hugging
 - Kissing
 - Offering objects
 - Verbal

Results

80.6% of children displayed at least one comforting behaviour (25/31 children)

Figure 1: Frequency of Observed Comforting Behaviours



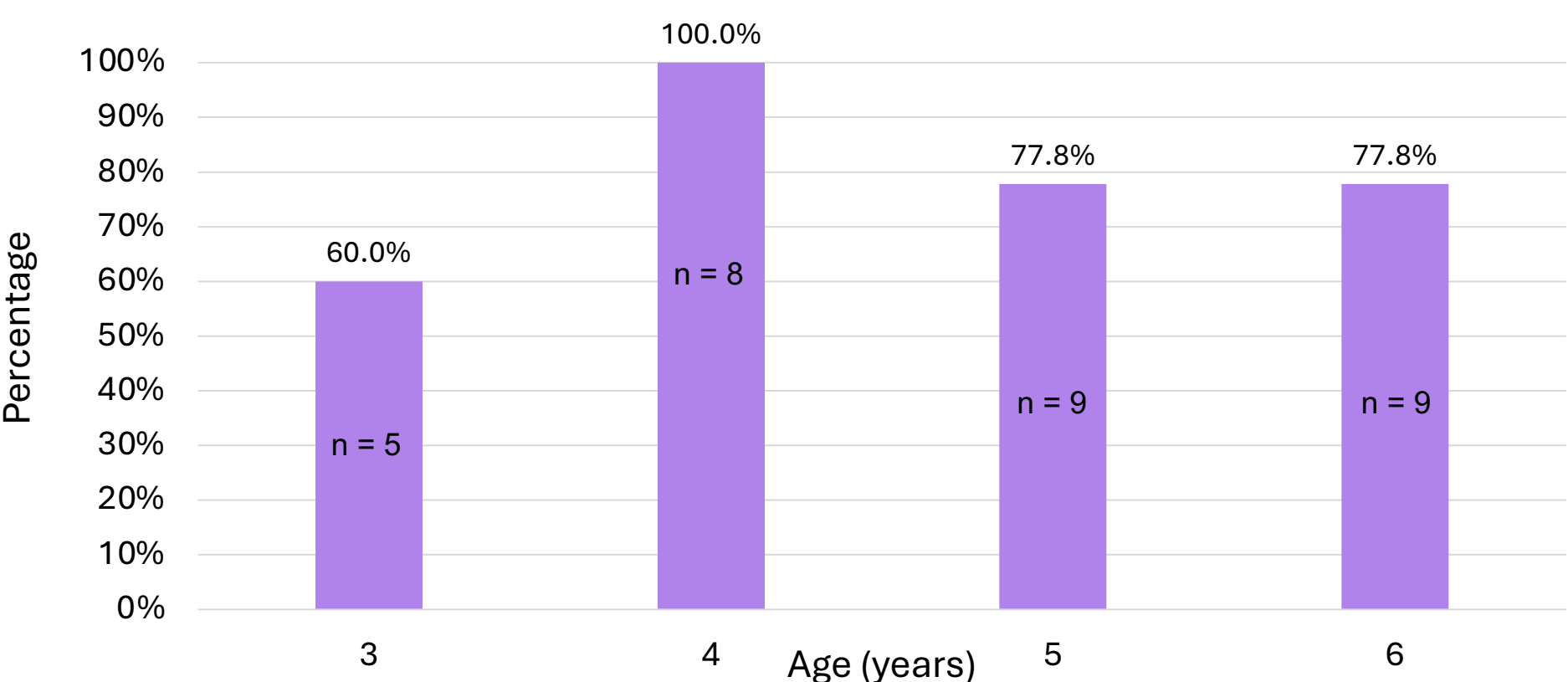
Median latency to first comforting = 13 seconds

Range = 1 – 30 seconds

Age and Comforting:
Age was not associated with comforting
Comforting:
 $\rho = -.031, p = .869$
Concern:
 $\rho = .094, p = .615$
No significant age-related associations were found for concern or comforting.

Emotional understanding:
“How Was Mummy Feeling?”
77.8% (21/27) gave a response consistent with recognition of the caregiver’s negative emotional state.
Recognition of distress did not necessarily coincide with comforting behaviour.

Figure 2: Proportion of Children Displaying at Least One Comforting Behaviour by Age



Discussion and Conclusion

Discussion

- **Comforting was common:**
 - 80.6% of children displayed at least one comforting behaviour.
 - **Verbal comforting** and **patting** were the most frequent responses (Figure 1).
 - Comforting is an observable form of prosocial response to distress (Dunfield, 2014).
- **Comforting did not increase linearly with age:**
 - **No significant association** between age and comforting score.
 - Age-group proportions showed **no clear linear increase** (Figure 2).
 - Vreden et al. (2025) found comforting increased between 9 and 18 months.
- **Development may involve qualitative change:**
 - Preschool development may involve greater **sophistication** or **appropriateness** of comforting, rather than simply increased **frequency**.
 - This supports Paulus et al. (2020) who found greater understanding of empathy-based comforting in 5-year-olds compared to 3-year-olds.

Limitations

1. **Small sample:** N = 31, reducing statistical power.
2. **Single behavioural measure:** comforting only captures **one** behavioural expression of empathy.
3. **Simulated distress:** children may have differed in how seriously they interpreted the simulated injury.

Conclusion: Comforting was frequently observed in children aged 3-6 years but did not show a straightforward increase with age.

These findings suggest that developmental changes in empathic responding during the preschool years may involve **qualitative changes** in how children respond to distress, rather than simply an increase in comforting frequency.

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