**Introduction**

Infants form attitudes towards people on the basis of how they treat and are treated by others (Hamlin, Wynn, & Bloom, 2007; Feiring, Lewis, & Star, 1984).

Reasoning about third-party social relationships requires children to set aside their own attitudes towards a set of people (i.e., who is “good” and “bad”) and consider each person’s attitudes towards the other.

Litttle is known about young children’s ability to reason in this way. Do they understand how social behaviors create relationships, or how relationships influence behavior?

Here we explore infants’ and toddlers’ representations of third-party social relationships by examining their understanding of one common consequence of them: that friends typically show concern for one another, while mere acquaintances may be more indifferent to one another’s fates.

**Method**

Participants

- Experiment 1: 24 19-month-olds (18;0 – 20;0)
- Experiment 1b: 24 19-month-olds
- Experiment 2: 24 26-month-olds

Familiarization

- Participants observed a sequence of natural social interactions among three adults: a main experimenter (E1) was friendly toward one person (Friend), and neutral toward another (Acquaintance).
- Both the Friend and Acquaintance also addressed participants cheerfully.

Test event

- E1 told participants she would retrieve more toys, and carried a tray.
- Then, participants heard the toys fall with a loud crash and E1’s cry of distress (“Oh no!”). Twice afterwards, E1 requested help (“Oh, can somebody help me?”). E1, whereas the Acquaintance only interacted with the participant (and played on her own).

Dependent measure

- Frame-by-frame analysis of participants’ eye gaze during 30-second response period after crash.
- Difference score: time spent looking to Friend versus Acquaintance.

**Experiment 1**

**Do young children look to the friend of a person in distress?**

- 26-month-olds looked more towards the distressed person’s friend than to her mere acquaintance, $t(23) = 2.74, p = .012$.

- 19-month-olds did not distinguish between them, $t(23) < 1, p = ns$.

The difference between age groups was significant, $t(46) = 1.82, p = .038$ (one-tailed).

**Discussion**

When an unseen experimenter was in distress, 26-month-old toddlers looked longer to her friend.

Since both the Friend and Acquaintance had acted in a friendly way towards the participant (Exp 1 and 2), and both had been seen acting pro-socially towards another person (Exp 2), this result is not likely due to the child’s own preference for the Friend.

This suggests that 26-month-olds represent a connection between two people following their friendly interaction with one another, and make appropriate inferences from it: they expect people to show concern for their friends, and possibly even to help them.

- Further studies are necessary to distinguish between richer forms of relationship understanding and lower-level associations.
- For instance, does the content of the interaction influence attributions of friendship?

**Experiment 1b**

**Did the caregiver’s position in Experiment 1 decrease younger children’s performance, by creating a side bias?**

A new set of 19-month-olds sat on their caregiver’s lap at the table.

There was no longer a significant side bias, $t(22) < 1, p = ns$.

Nevertheless, younger participants still did not look significantly more to the distressed person’s friend, $t(23) = 1.31, p = .20$.

**Experiment 2**

**Did older children in Experiment 1 look to the Friend simply because she had been in more pro-social interactions overall?**

That is, in Experiment 1, the Friend interacted with the participant and with E1, whereas the Acquaintance only interacted with the participant (and played on her own).

Experiment 2:

- two pairs of friends during familiarization (4 people total)
- at test, one person left the room, and a member of the other pair played the role of the distressed experimenter
- perfectly equated the Friend’s and Acquaintance’s pro-social behaviors

26-month-olds still looked longer to the distressed person’s friend, $t(23) = 2.08, p = .049$.

19-month-old infants did not look significantly longer to the friend.

In previous studies (e.g., Kuhlmeier et al., 2003), even younger infants have expected one animated character to possibly even to help them.

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- For instance, does the content of the interaction influence attributions of friendship?