

## Background

- Rituals are a pervasive feature of human social groups, ranging from elaborate religious ceremonies to rites of passage, to blowing out candles on a birthday cake.
- Rituals are prescribed by social norms, causally opaque, deliberate and symbolic actions.<sup>1-4</sup>
- Rituals serve proposed functions to identify group members, demonstrate group commitment, facilitate cooperation, and maintain group cohesion.<sup>5-6</sup>
- Though ritual participation increases children's affiliation with in-group members<sup>7</sup>, there is little work examining the impact of ritual on children's group cognition and behavior.

## Research Questions

- **Do children use ritual performance as a cue to cooperativeness?**
  - Do they expect someone who performs a ritual well to be a better group member?
    - Share resources with the group
    - Be included by the group
  - Do they evaluate someone who performs a ritual well more positively and prefer to interact with them?
    - Attribute more positive behaviors
    - Attribute less negative behaviors
    - Preferable play partner

## References

<sup>1</sup> Hove & Risen, 2009. *Social Cognition*. <sup>2</sup> Kirschner & Tomasello, 2010. *Evolution & Human Behavior*. <sup>3</sup> Legare & Souza, 2012. *Cognition*. <sup>4</sup> Sorenson, 2007. *A Cognitive Theory of Magic*. <sup>5</sup> Legare & Watson-Jones, 2016. *The Handbook of Evolutionary Psychology*. <sup>6</sup> Watson-Jones & Legare, 2016. *Current Directions in Psychological Science*. <sup>7</sup> Wen, Herrmann, & Legare, 2015. *Evolution & Human Behavior*.

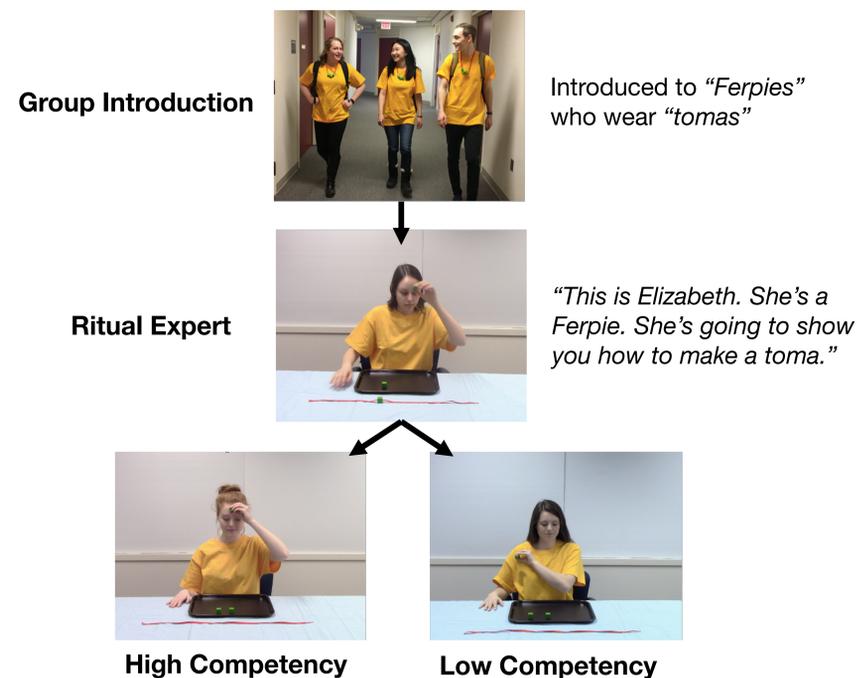
## Acknowledgments

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## Method

- Participants:  $N = 75$  5-9-year-olds



### Forced Choice Task

Measure	Example
1. <b>Expectations for generosity</b>	Who will share a snack with another Ferpie?
2. <b>Expectations for inclusion</b>	If the Ferpies were making a sports team, who would they pick to be on their team?
3. <b>Preferred play partner</b>	Who would you rather play a game with?
4. <b>Positive attributions</b>	Who made cookies for all of their friends?
5. <b>Negative attributions</b>	Who made a mess and didn't clean up?

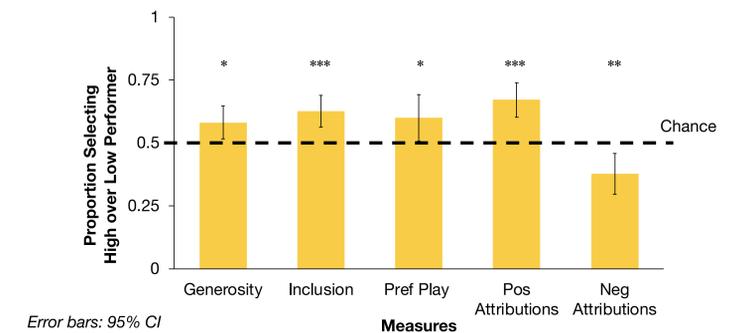
### Resource Allocation Task

Does Sally give none, some, or all of her cookies to the Ferpie cookie sale?



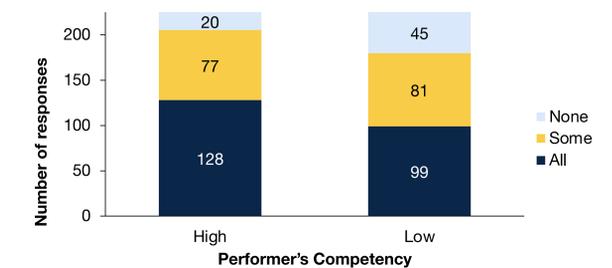
## Results

### Forced Choice Task



- Children's evaluation of the high competency performer:
  1. Will **share resources** with the group.  $t(74)=2.50, p = .015, d = 0.29$
  2. Will be **included** by the group.  $t(74)=4.01, p < .001, d = 0.46$
  3. Is a **preferable** play partner.  $t(74)=2.15, p = .035, d = 0.25$
  4. More **positive attributions**.  $t(74)=4.98, p < .001, d = 0.57$
  5. Fewer **negative attributions**.  $t(74)=-3.00, p = .004, d = 0.35$

### Resource Allocation Task



- Children expect the high competency performer to be **more generous** than low competency performers.  $\chi^2(2, N=75)=13.42, p=.001$
- Standardized residuals show children expected the high competency performer to **give all of their resources** (1.36) and less likely to **give none of their resources** (-2.19).

## Discussion

- Children use ritual performance as a marker of cooperation.
- They expect someone who performs a ritual well to be a better group member, evaluate them more positively, and prefer to interact with them.
- In an ongoing study, we test whether children differentiate competency in ritual vs. instrumental learning.