

# Preschool-Aged Children's Attributions of Physical and Social Power

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## Background

The ability to infer whether one person is physically and/or socially more powerful than another is an essential part of knowing how to behave towards others and successfully navigate the social world. One of the mechanisms through which we make such inferences is through the use of nonverbal cues, such as postures and facial features (Weisfeld, 1982).

Previous research has shown that 5-year-old children make inferences about social power based on other people's posture (Brey & Shutts, 2015), while 3-year-olds infer physical strength from facial information (Cogsdill, et al., 2014). The process through which children arrive at these inferences is not clearly understood. Here we use both faces and postures to investigate developmental trajectories in children's attributions of physical and social power.

## Aims

One aim is to replicate two previous findings:

- 3-year-olds infer strength from faces.
- 5-year-olds infer social power from postures.

The second aim is to assess whether children make both attributions using each stimulus type:

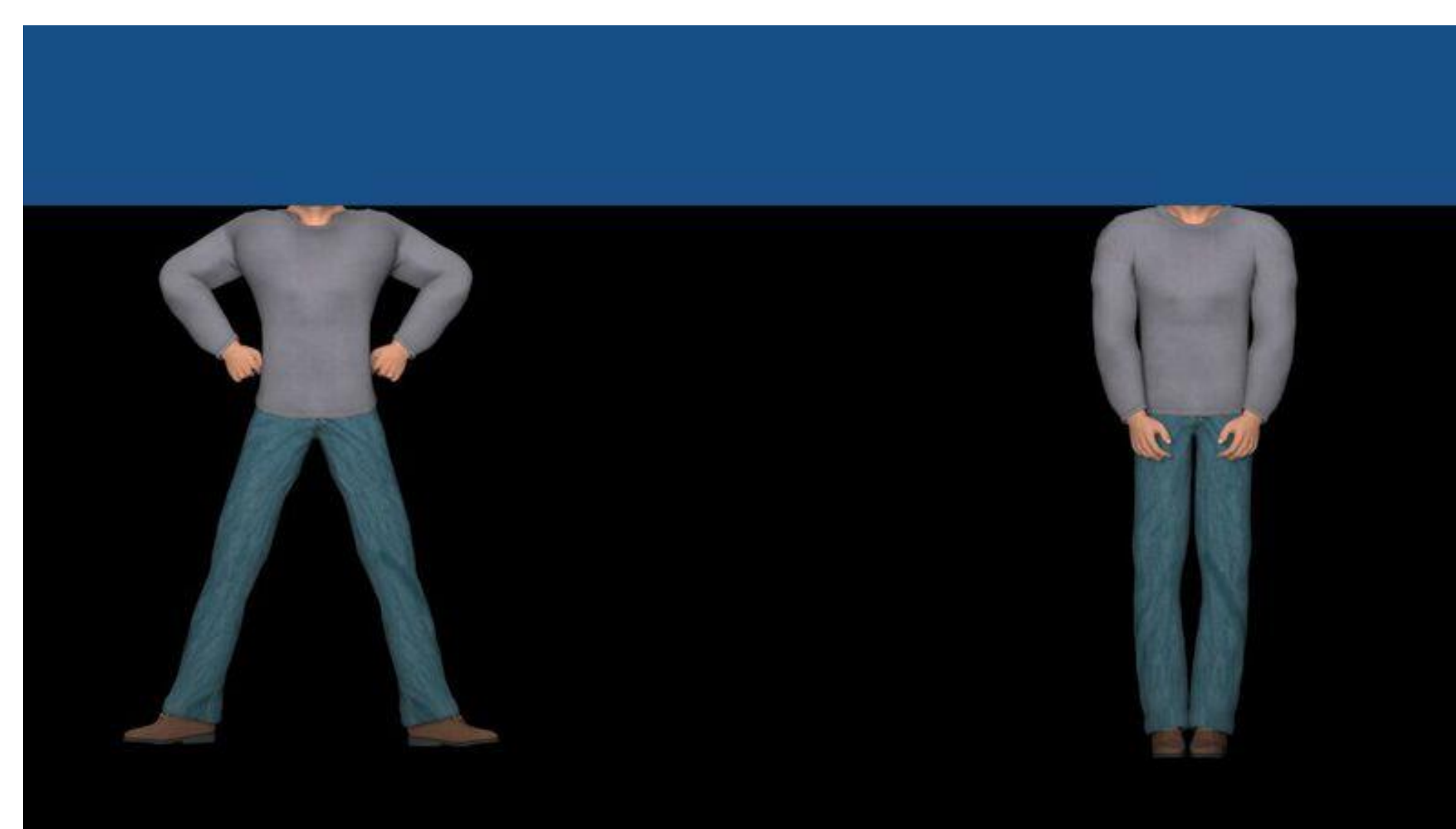
- Do faces drive attributions of social power?
- Do postures drive attributions of strength?

Finally, how do children's abilities to make these inferences change during early childhood?

## Methods & Design

### 3-year-olds

Current  $n = 9/32$  total (5 females, 4 males)  
 $M: 3.65$  years; range: 3.34 – 3.99 years



Example stimuli: postures

### 5-year-olds

Current  $n = 6/32$  total (4 females, 2 males)  
 $M: 5.46$  years; range: 5.06 – 5.75 years



Example stimuli: faces

Question Type	Who is in charge?		Who is stronger?	
Stimulus Type	Faces	Postures	Faces	Postures

The presentation of both question, stimulus type, and the side of the screen on which the dominant character appears is counterbalanced across participants.

## Preliminary Conclusions

Data collection is ongoing, but some current patterns are worth highlighting:

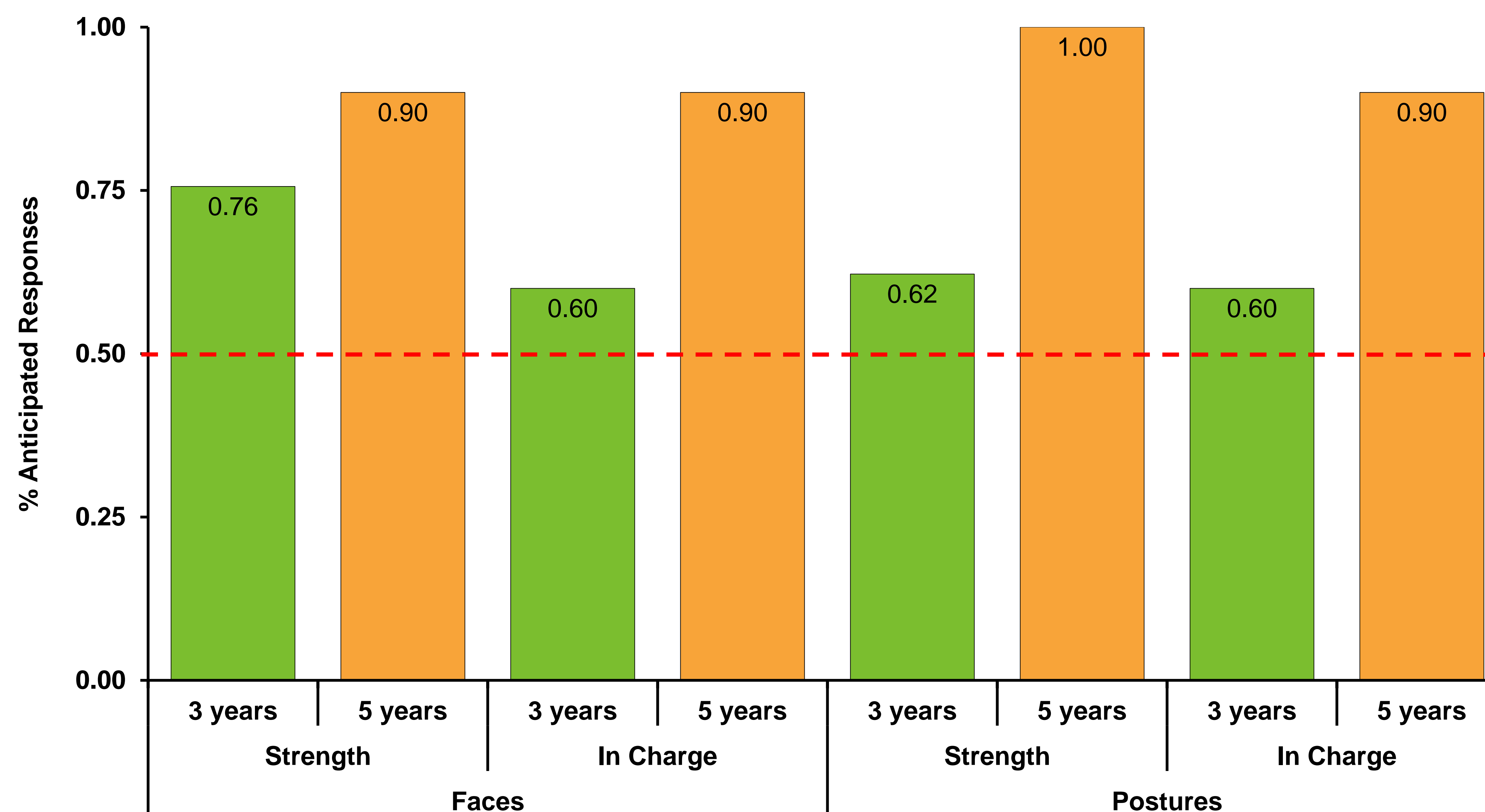
- 5-year-olds make both types of attributions (strength and social power) when looking at faces and postures.
- 3-year-olds make attributions of strength when looking at faces, but not postures.

If these patterns hold at the end of the study, this would provide support for at least two conclusions:

- 5-year-olds are able to form attributions regarding individual-specific traits in addition to forming attributions regarding relational differences.
- 3-year-olds are able to form attributions of traits that are unique to individuals, but are unable to generalize these traits and make relational attributions.

The ability for 5-year-olds to perform above chance when making relational attributions may be indicative of normative social development in children. As children become accustomed to larger social environments, such as preschools, they may improve the ability to make attributions of individual traits while also developing the ability to make adaptive relational attributions. Future research may seek to study changes in children's abilities to make the types of attributions as they become immersed in more complex social environments.

## Preliminary Results



## References

- Brey, E., & Shutts, K. (2015). Children use nonverbal cues to make inferences about social power. *Child Development*, 86(1), 276-286. doi:10.1111/cdev.12334
- Cogsdill, E. J., Todorov, A. T., Spelke, E. S., & Banaji, M. R. (2014). Inferring character from faces: A developmental study. *Psychological Science*, 25(5), 1132-1139. doi:10.1177/0956797614523297
- Weisfeld, G. E., & Beresford, J. M. (1982). Erectness of posture as an indicator of dominance or success in humans. *Motivation and Emotion*, 6(2), 113-131. doi:10.1007/bf00992459