

THE UNIVERSITY OF TEXAS AT DALLAS

# DEVELOPMENTS

INFANT LEARNING PROJECT

FALL 2019

## *Inside this Issue!*

- 1 • Infant Learning Project Information
- 2 • 2019 Lab Team & Article Review
- 3 • Continuation of Article Review
- 4 • Lab Updates
- 5 • Announcements & Additional Research Opportunities at UT Dallas

## Infant Learning Project

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Fall 2019

# Infant Learning Project Team

Faculty Lab Director  
Melanie J. Spence, Ph.D.

Undergraduate Research Assistants

Abbie Roberts

Madeline Hale

Meg Mickelson

Sarah Rehman

Samia Razvi

## Examining Various Aspects of Humor Perception in Infants

BY SAMIA RAZVI

It is known that infants begin to laugh at around four months, but when they begin to perceive humor is yet unclear. When do infants stop relying on parental cues to find a stimulus amusing, and begin deciding on their own? Additionally, whether humor perception is based on social influences or cognitive factors has been a long-held debate. Social theorists believe that behaviors such as smiling or laughing are tools of social communication, largely used in forming interpersonal relationships; thus, such actions are much less common when alone even if the individual finds something funny. The cognitive theory asserts that there must be a different explanation for why people perceive humor, since humans (especially young children) spend much of their time with others, yet only a small fraction of that time is spent laughing. According to this theory, humor is dependent on incongruity, which is “a mismatch between what is expected and what actually happens” (Hoicka, 2014). If incongruity is found in an entertaining and playful environment, then what would normally be perceived as surprising is instead seen to be humorous.

A study done by Mireault et al. in 2017 aimed to investigate when infants can independently decide that an absurd event is humorous instead of relying on parental cues, such as seeing the mother laughing. They did so by having infants watch as parents were presented with two ordinary events and two absurd events. Each event was played twice, and for the absurd events, the parents smiled and laughed for one run (termed “absurd-cued”), and maintained a neutral reaction for the second run (termed “absurd-neutral”). Parents remained neutral to both normal events to maintain their ordinary nature.

The findings of the study were eye-opening: 4-month-olds did not perceive the absurd or ordinary events as humorous, even when absurd events were accompanied with the parent laughing and smiling. This was determined by the low frequency of laughing and smiling exhibited by the baby in response to the events. Interestingly, based on looking time, infants preferred to look at ordinary events the most and the absurd-cued events the least. This could be due to the effect of the parents' lack of positive reaction to the absurd action during the absurd-neutral event, causing a loss of interest during the absurd-cued event which followed.

Although 4-month-olds did not laugh or smile at the absurd-cued events, they did appear to respond to these absurd events in the same way that the parents had initially responded to the absurd events by showing neutral affect. The authors suggest these findings imply that infants' response at 4 months is largely dependent on social cues, rather than finding the stimuli itself humorous. However, at the age of 5 months, infants experience a shift and begin to perceive incongruent events as humorous without social confirmation from their parents. They would laugh and smile at an absurd event even if their parents remained neutral. This phenomenon persisted all the way through 8 months of age, which was the oldest age in which infants were tested. The authors argue there is a shift from using social cues to interpret events in social situations to using cognitive incongruity beginning at 5 months of age. Although these results are interesting and an important early step toward understanding this area, there is still much more research to be done about infant humor perception.



## REFERENCES

Hoicka, E. (2014). The pragmatic development of humor. In D. Mathews (Ed.), *Pragmatic development in first language acquisition* (pp. 119–237). Amsterdam, the Netherlands: John Benjamins Publishing Company. <https://doi.org/10.1075/tilar.10.13hoi>

Mireault, G. C., Crockenberg, S. C., Heilman, K., Sparrow, J. E., Cousineau, K., & Rainville, B. (2017). Social, cognitive, and physiological aspects of humour perception from 4 to 8 months: Two longitudinal studies. *British Journal of Developmental Psychology*, 36(1), 98–109. <https://doi.org/10.1111/bjdp.12216>

# THANK YOU

We greatly appreciate all of the infants & parents who have participated in our studies. Without you, our research would not be possible!

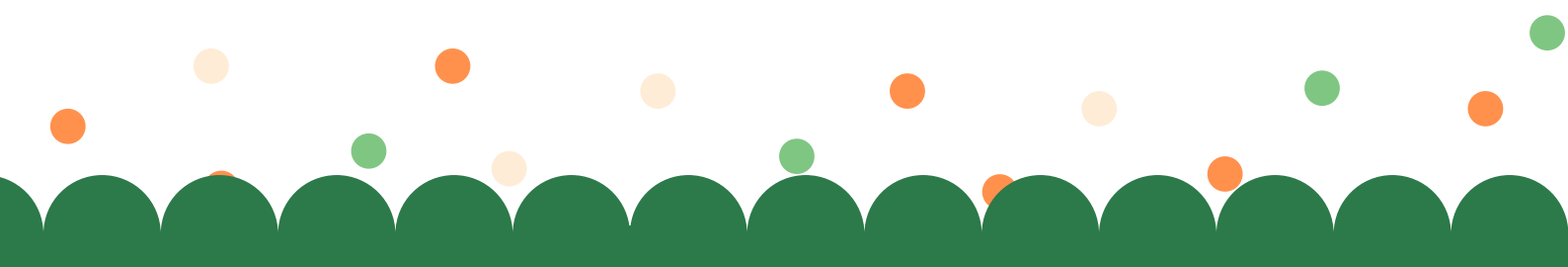
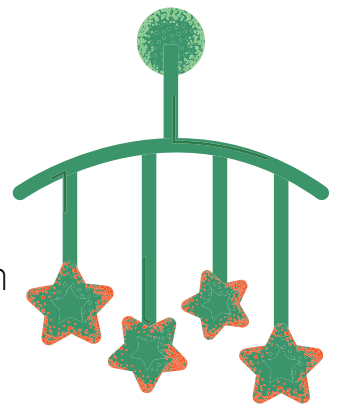
## *Lab Updates!*

Madeline Hale and Abigail Roberts entered to the Southwestern Psychological Association two original abstracts for review.

Madeline Hale's abstract regards the acoustic properties of infant-directed speech in a naturalistic play scenario versus infant-directed speech over video chat. With technology ever increasing its presence in our lives and becoming an important parenting tool, it is important that the benefits of infant-directed speech translate to video chat scenarios. Ms. Hale's research pursues this question, suggesting that the acoustic properties of infant-directed speech are indeed maintained in video chat scenarios.

Abigail Roberts' research explored children's and mother's use of mental state terms, terms that refer to thinking, knowing, wanting, sensing and intending. Although the mother's mental statements were not related to children's language outcomes, children's use of mental state terms was related to their overall vocabulary, suggesting that children develop some basic vocabulary before they grasp mental state concepts. Coding of the mental state terms was done by Ms. Roberts, along with Samia Razvi and Sarah Rehman.

The statistical analysis for both projects was done primarily by Meg Mickelsen.



# Congratulations

## Abigail Roberts

### B.S. IN SPEECH-LANGUAGE PATHOLOGY & AUDIOLOGY

Abigail will continue her education as a Master's student in UTD's program for Communication Disorders. She hopes to become a licensed speech-language pathologist and work with the pediatric population.



## *The Think Lab is looking for young scientists!*

Children will play games, view pictures, &/or hear stories and will answer questions.

### Eligibility:

Children ages 3 to 10 are invited to participate in our studies about how children evaluate information.

Testing lasts 30 to 60 minutes.

Payment is a prize for kids & a \$10-15 gift card as a thank you!

Please contact

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(972) 883-6075

**thinklab**

## *Congratulations to Madeline & Meg!*



Two members of our lab, Madeline Hale and Meg Mickelsen, were inducted into the UT Dallas chapter of the prestigious Phi Kappa Phi Honor Society. As the country's oldest, largest, and most selective multidisciplinary honor society, it exemplifies academic and personal excellence.