



# Learning from Statements

## Introduction and Background

- Subtle changes in language can affect the assumptions children make about groups.
- Statements about mentioned groups can also convey information about unmentioned groups.
- In Moty and Rhodes (2021)<sup>1</sup>, two novel groups (Zarpies and Gorps) were presented as being good at different activities and children had to rate the ability of individuals within the mentioned and unmentioned groups.
  - For example, children heard the statement, "Zarpies are good at jumping" and inferred that individual Zarpies are also good at jumping. Additionally, they inferred that individual Gorps are not good at jumping.
- Specific statements can cause people to learn new stereotypes about groups' abilities.
  - For example, when adults heard, "girls are as good as boys at trewting"<sup>2</sup> they assumed that boys are more naturally skilled while girls had to work harder to be good at trewting.
- This phenomenon could potentially impact individuals' perceptions about specific activity days. For example, if presented with a "Girls STEM Day", would participants assume that the mentioned group (girls) had to work harder to be good at STEM, while the unmentioned group (boys) are assumed to be more naturally skilled?
- In sum, we are interested in how children will make inferences about mentioned and unmentioned groups when hearing about activity days for one particular group.

## Research Questions

- When children hear about designated activity days targeted toward certain social groups, how do they rate the ability of the mentioned and unmentioned groups at the certain activity?
- Could children learn new stereotypes from statements about designated activity days?

## Design and Methods

Child participants will complete a pre-recorded study on a desktop computer.

Introduction Phase: Participants are introduced to the two groups: Zarpies (Yellow) and Gorps (Green). Participants are asked to identify individual and groups of Zarpie(s) and Gorp(s). *i.e.*, "Can you click on the Zarpies?"



Scale Phase: Participants are introduced to a smiley face scale used to rate how good the two groups are at an activity. The scale ranges from "really not good" (leftmost sad face) to "really good" (rightmost happy face). Participants are asked to identify each face.

*i.e.*, "Which face would you click on if you think they are really not good at it?"



Test Phase: Participants are told about a special day and are then asked how good they think Zarpies and Gorps are at the activity. Participants complete four blocks with different activities (Sledding, Hopping, Snapping, Whistling). The order in which they are asked about Zarpies and Gorps is counterbalanced and alternating between participants (*i.e.*, ZGZG/GZGZ).

*i.e.*, "There is a Zarpie sledding day. Do you think Zarpies/Gorps are really not good...really good at sledding?"



Post-Test: After completing the test phases, participants are asked why they clicked on the smiley face they chose in the last block. Participants are also asked what they think the study is about.

## Predicted Results

- We expect that children will either assume:
  - The mentioned group is good at the activity (therefore gets a special day dedicated to the activity)
  - The mentioned group is not good at the activity (therefore needs a special day dedicated to the activity)
- We predict that children will make assumptions about the unmentioned group based on what they think about the mentioned group; *i.e.*, if they think Zarpies are really not good at sledding, they could predict that Gorps are really good at sledding.

## Implications

Our predicted results would indicate that hearing about designated activity days can unintentionally encourage stereotype development about both the mentioned and unmentioned groups.

If we find that negative stereotypes are being associated with groups based on children hearing about special activity days, we should reconsider the messaging that surrounds events such as Girls STEM Day. For example, if children make assumptions that a "Zarpie sledding day" indicates that Zarpies are bad at sledding and need more help, this may reflect similar beliefs that are held about Girls STEM days.

## Future Directions

- A follow-up study will be conducted with all Zarpies and all Gorps conditions (focusing on one group might be a better representation of real-world designated activity days).
- We will also repeat the study with adults to test whether the learning stereotypes effect is unique to children.
- Another possibility is repeating the study with two measures: perceived natural ability and perceived effort.

## References

- 1) Moty, K., & Rhodes, M. (2021). The unintended consequences of the things we say: What generic statements communicate to children about unmentioned categories. *Psychological Science*, 32(2), 189-203.  
2) Chestnut, E. K., Zhang, M. Y., & Markman, E. M. (2021). "Just as good": Learning gender stereotypes from attempts to counteract them. *Developmental psychology*, 57(1), 114.