

# The Impact of Information and Context on Promoting Parents' Early Academic Input

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## Introduction

- Preschoolers tend to have better numeracy knowledge if their parents provide frequent, rather than infrequent, numeracy input (e.g. Elliott et al., 2017).
- However, very little of parents' numeracy input to their preschoolers is about advanced numeracy concepts (Ramani et al., 2015).
- Additionally, parents' numeracy input is often related to their belief about the importance of numeracy for their children (e.g. Douglas et al., 2019).

## Questions

- Can parents' input and child-centered beliefs about magnitude comparison, an advanced numeracy concept, be promoted by providing parents with relevant information?
- How does the context of play and child gender affect parents' magnitude comparison input?

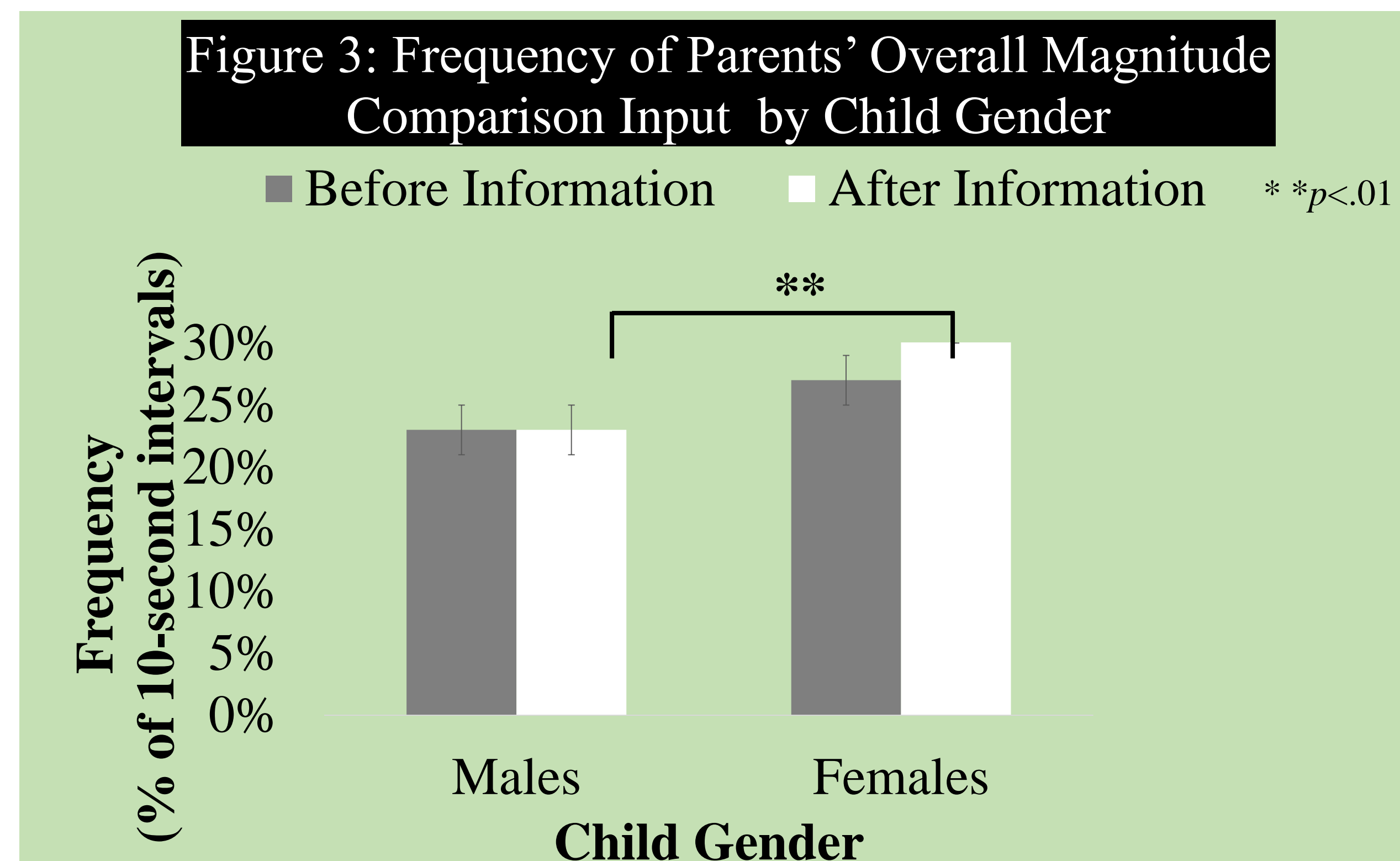
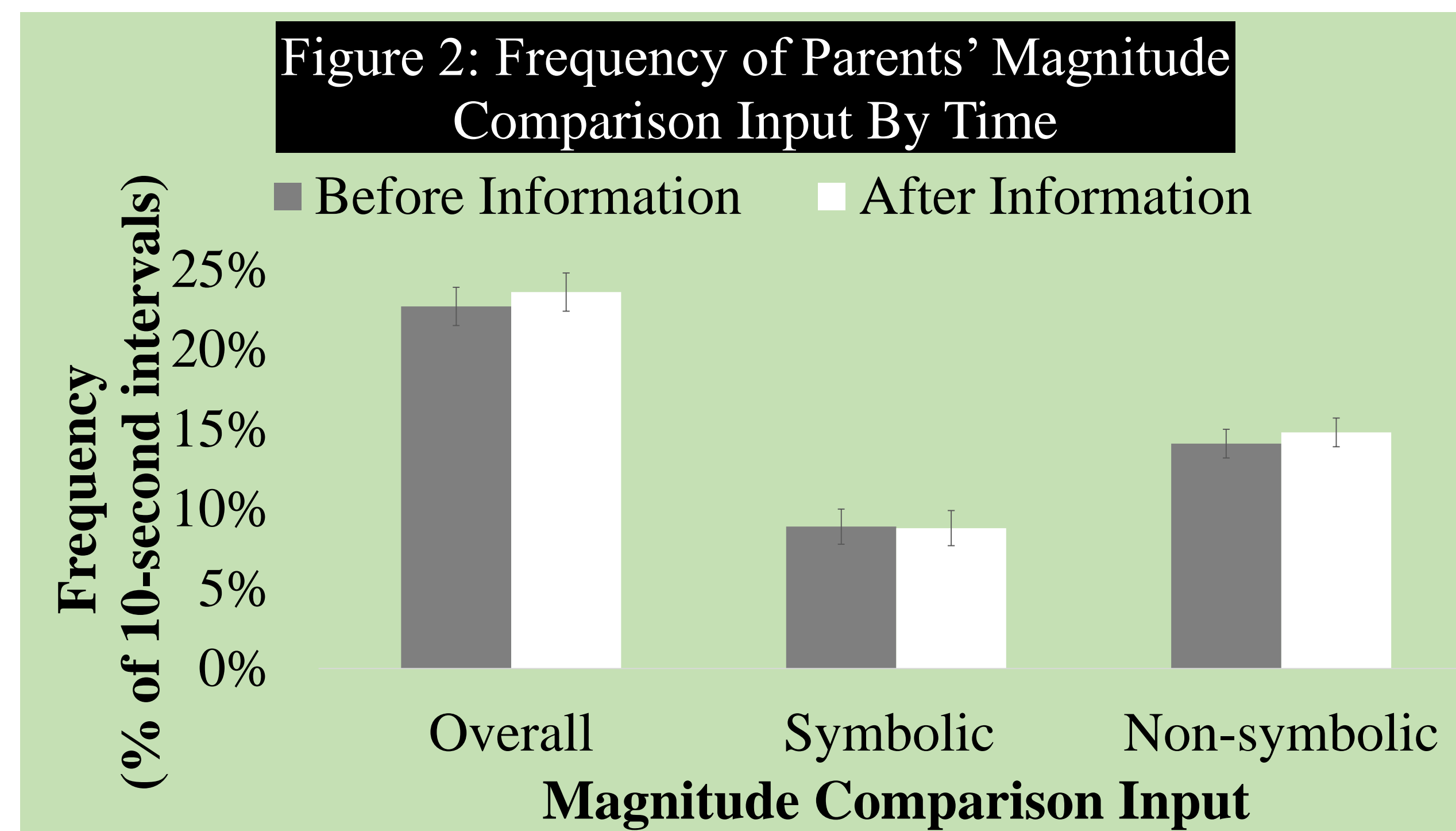
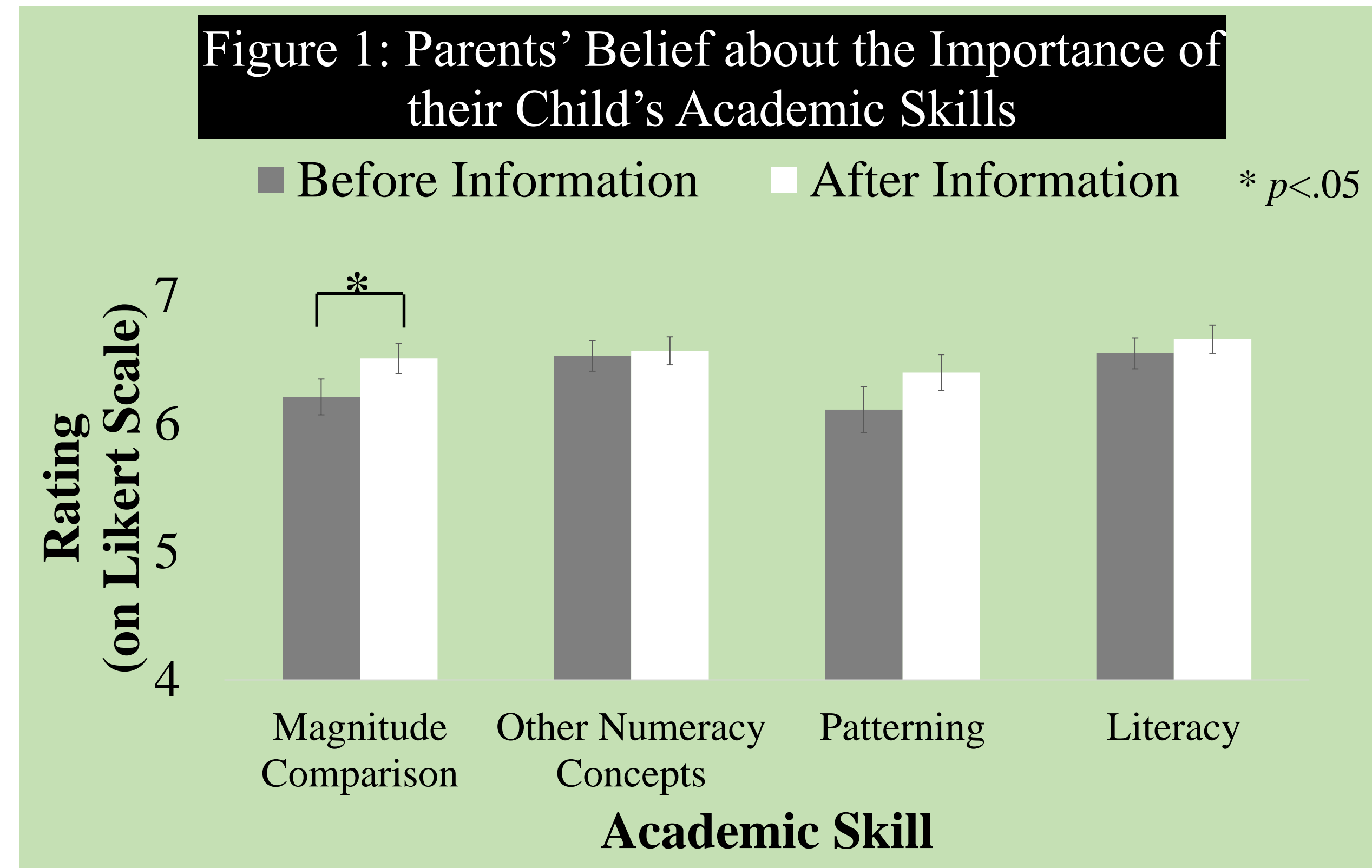
## Participants

- Sixty parents and their children ( $M = 4.43$  years,  $SD = .64$ , 53% boys) were recruited to engage in a twenty-minute, videotaped parent-child interaction.
- Parents were predominantly mothers (75%), White (83%), and well educated (76% of mothers and 80% of fathers had at least a bachelor's degree).

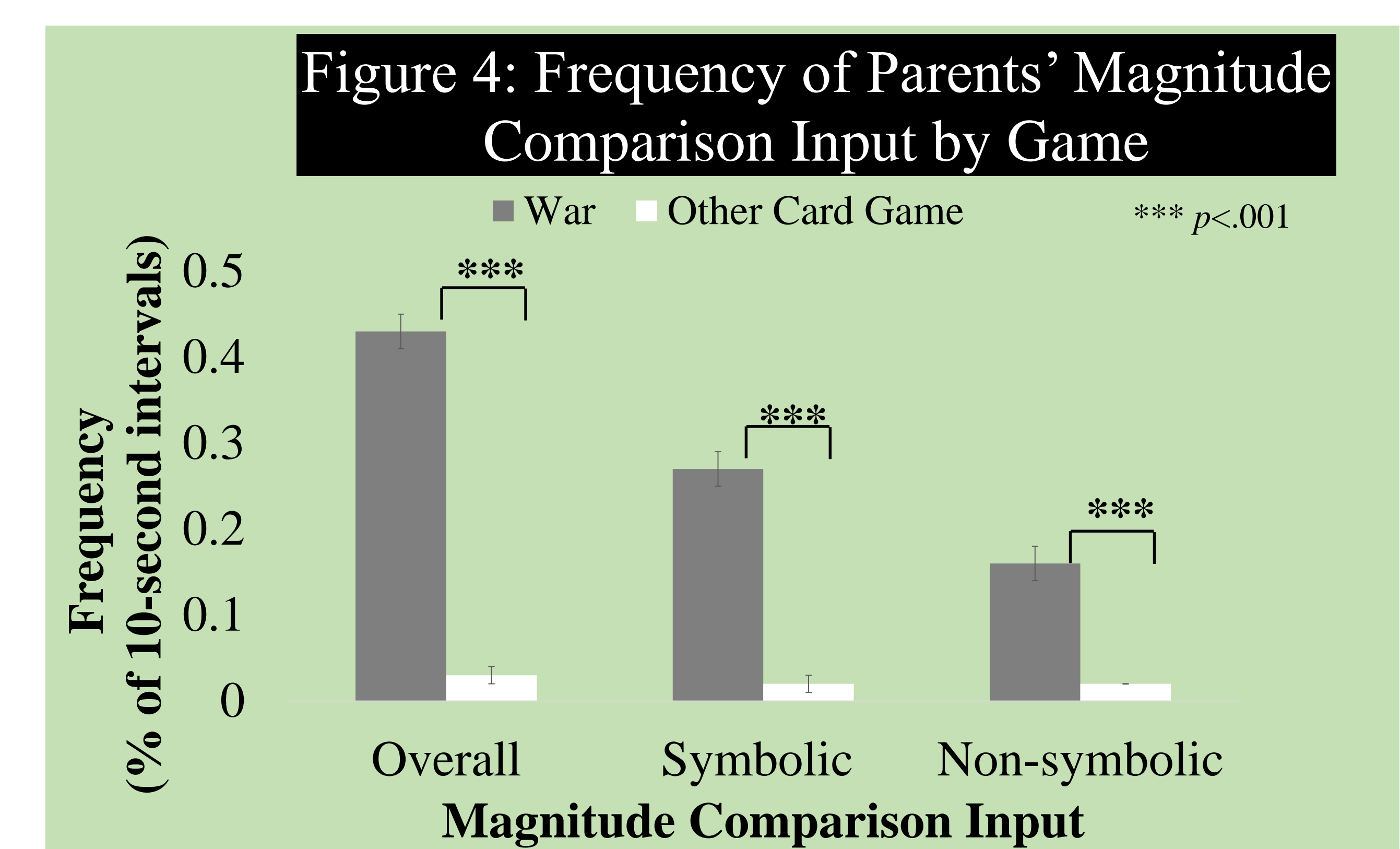
## Method

- Parents reported on their belief about the importance of their child's magnitude comparison and other academic skills on a 7-point Likert scale immediately before and about one week after a parent-child interaction.
- During the interaction, parents played two different card games with their child, received some information about magnitude comparison, and then played the two card games again.
  - Parents played the card game *War* and a different card game of their choice.
  - Parents received information about the importance of magnitude comparison skills in early math development and ways they can support the development of their child's magnitude comparison skills.
- Parents' talk about symbolic and nonsymbolic magnitude comparison during the interaction was coded in 10-second intervals using a coding scheme developed for the study.

## Results



## Results



## Discussion

- The current study indicates that parents' beliefs about early numeracy concepts are malleable (see figure 1).
- Future research on promoting parents' early numeracy input should consider child gender, given that the study successfully promoted magnitude comparison input among parents of girls but not among parents of boys (see figures 2 and 3).
- It also indicates that encouraging parents to play a specific card game (i.e. *War*) with their preschooler effectively promotes frequent parent magnitude comparison input (see figure 4).

## References

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