

Introduction

Background

- Patience in children, or the willingness to wait, has usually been studied using delay of gratification paradigms (e.g., children's ability to forego a smaller immediate reward in favour of a larger delayed reward)
- However, in the span of a day, there are many occasions where children are expected to show patience without the idea of a reward as a motivator (e.g., sitting in the doctor's waiting room). Surprisingly, this aspect of patience "as a virtue", has not been well documented

Aim

- Investigate the developmental difference in patience as a 'virtue', in children between 3 and 4 years of age
- Identify specific waiting strategies used by the children
- Study the differences in the use of these strategies between the two age groups

Method

Participants

- 22 3- and 4-year-olds

General procedure

- Children waited for a period of 6 minutes, separated into two 3-minute segments
- Using JWatcher software, videos were examined and coded for patient (e.g., waiting quietly) and impatient (e.g., interrupting a busy experimenter, standing up, etc.) behaviors, as well as strategies that children used to help them wait (e.g., distracting themselves by singing, playing, etc.)
- The coded behaviors were analyzed for their frequency and duration
- The level of patience of the children was determined using the length of time each behavior deemed to represent patience, such as resting their head on the table, was seen versus impatient behaviors such as standing up and walking around during the time span of 6 minutes

"I have some work to do, can you please sit here until I finish my work?"

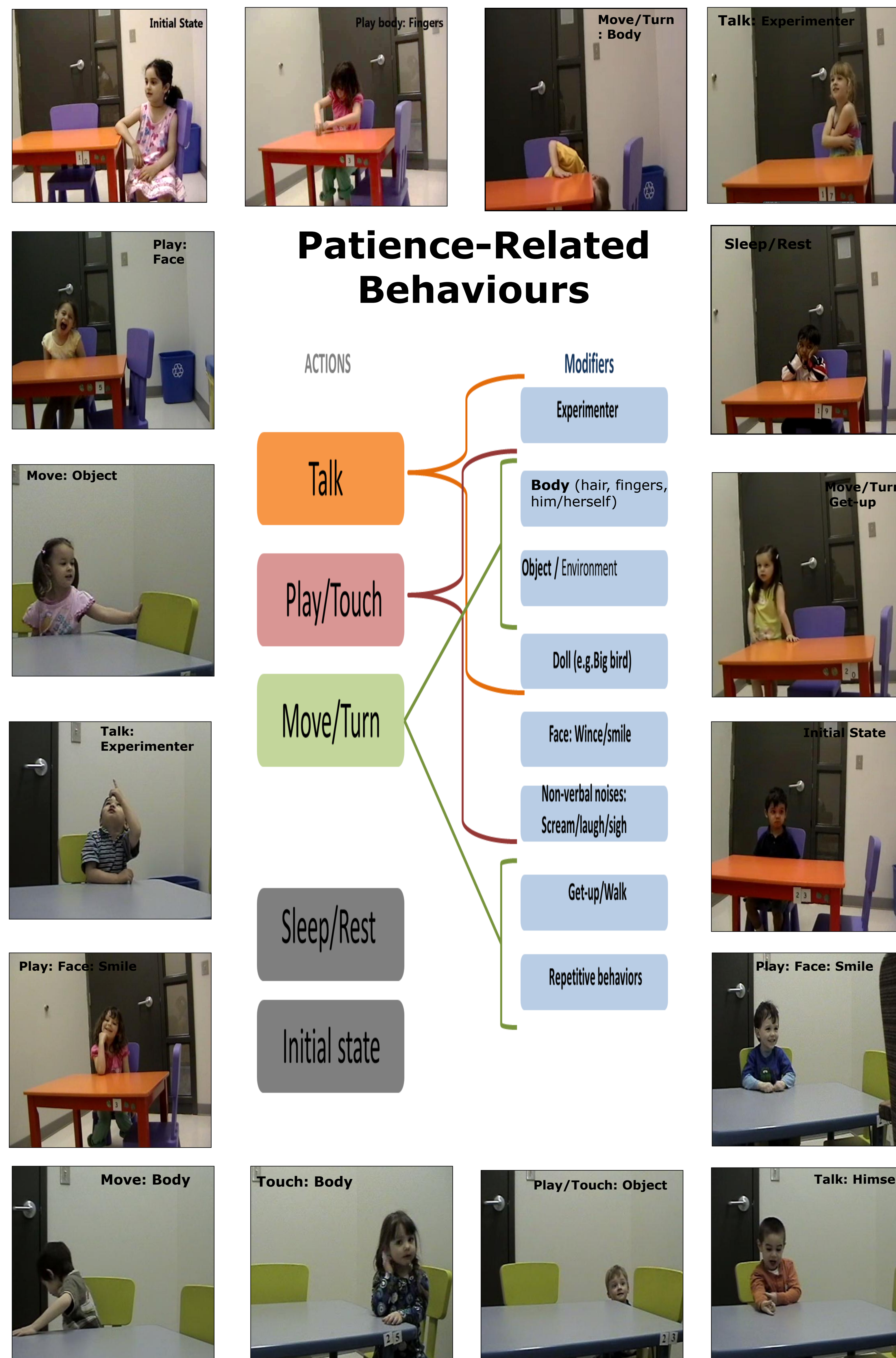


Figure 1. Examples of spontaneous patient and impatient behaviours.

Results

Main findings

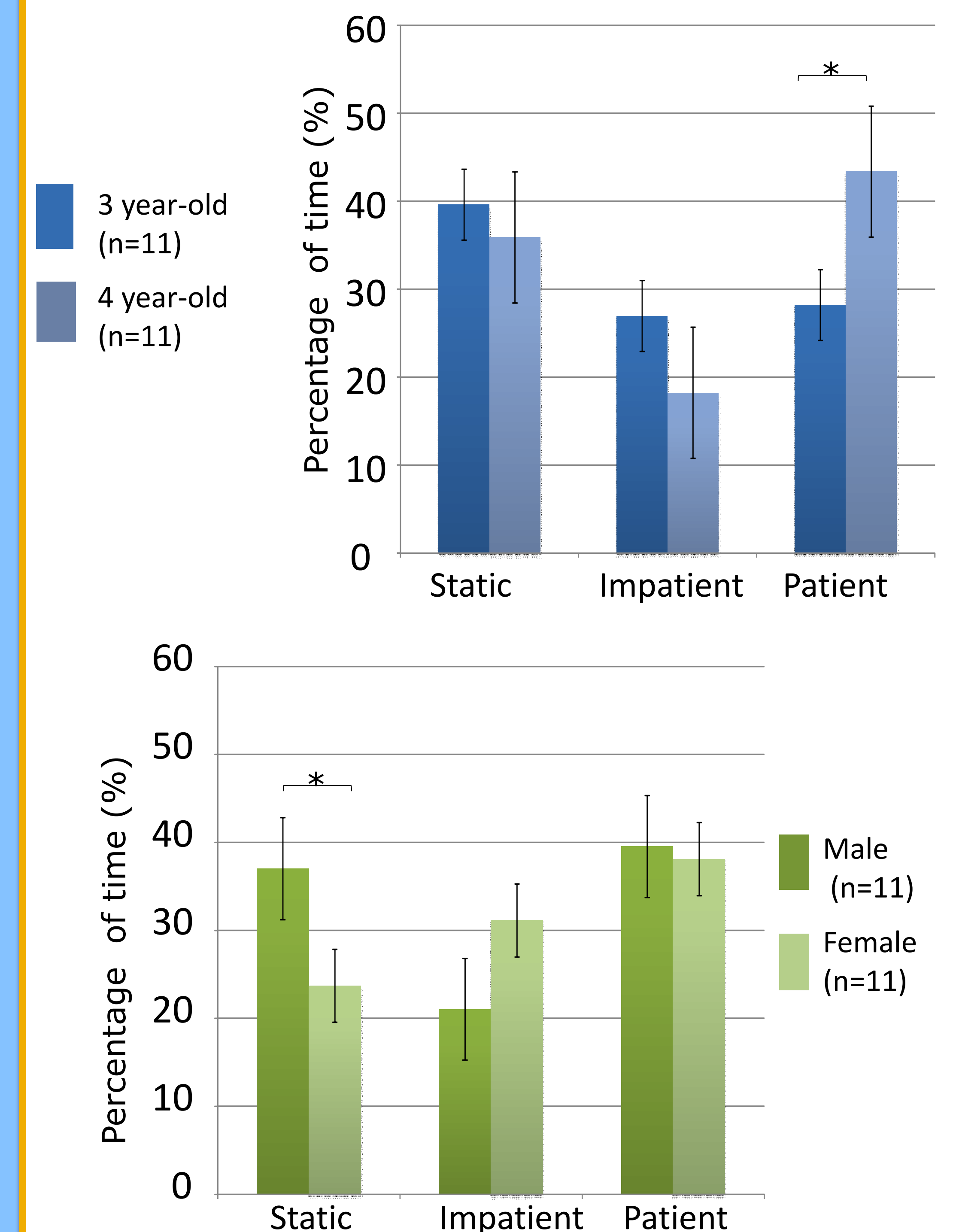


Figure 2. Score by age (top) and gender (bottom) for each type of behavior. Error bars represent standard error of the mean. * $p < 0.05$

Conclusions

Discussion

- Patience as a virtue appears to be a behaviour that has a physiological developmental aspect throughout early childhood
- Development of patience may be related to developments of certain areas of the brain (ie. frontal lobe which is responsible for inhibition, hence decreasing the occurrence of impatient behaviours)

Future directions

- Lack of information on this topic allows this research to provide a basis for future investigations of patience in children
- Our findings have deep implications for how to measure patience in children and future directions include examining whether children who can be categorized as patient in our waiting paradigm, are also proficient at delaying gratification

References: Mischel, W., Shoda, Y., & Rodriguez, M. I. (1989). Delay of gratification in children. *Science*, 244, 933–938.

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