

# Do children use demand principles to choose resources for themselves?

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**Background** Past research, using story telling methods, has indicated that children as young as 7-years-old are sensitive to the principles of supply and demand <sup>1,2,3,4</sup>. While this research has provided evidence that children understand supply and demand, little research has been conducted that would suggested children are able to make choices using their knowledge in a physical setting. In the current study, we investigated 4-to-10-year-old children's ability to understand and use demand principles when making decisions about which of two resources to choose for themselves.

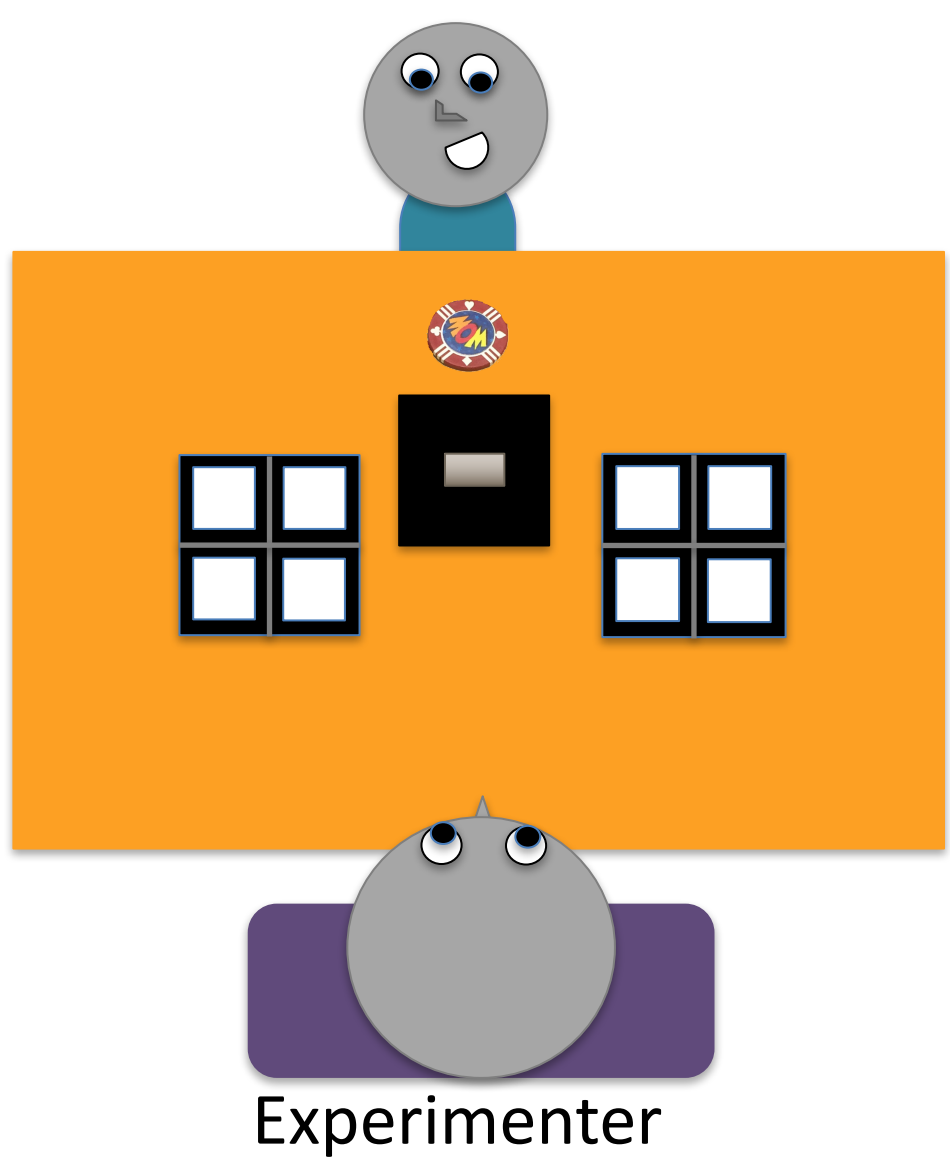
## Methods

### Low Stakes Condition



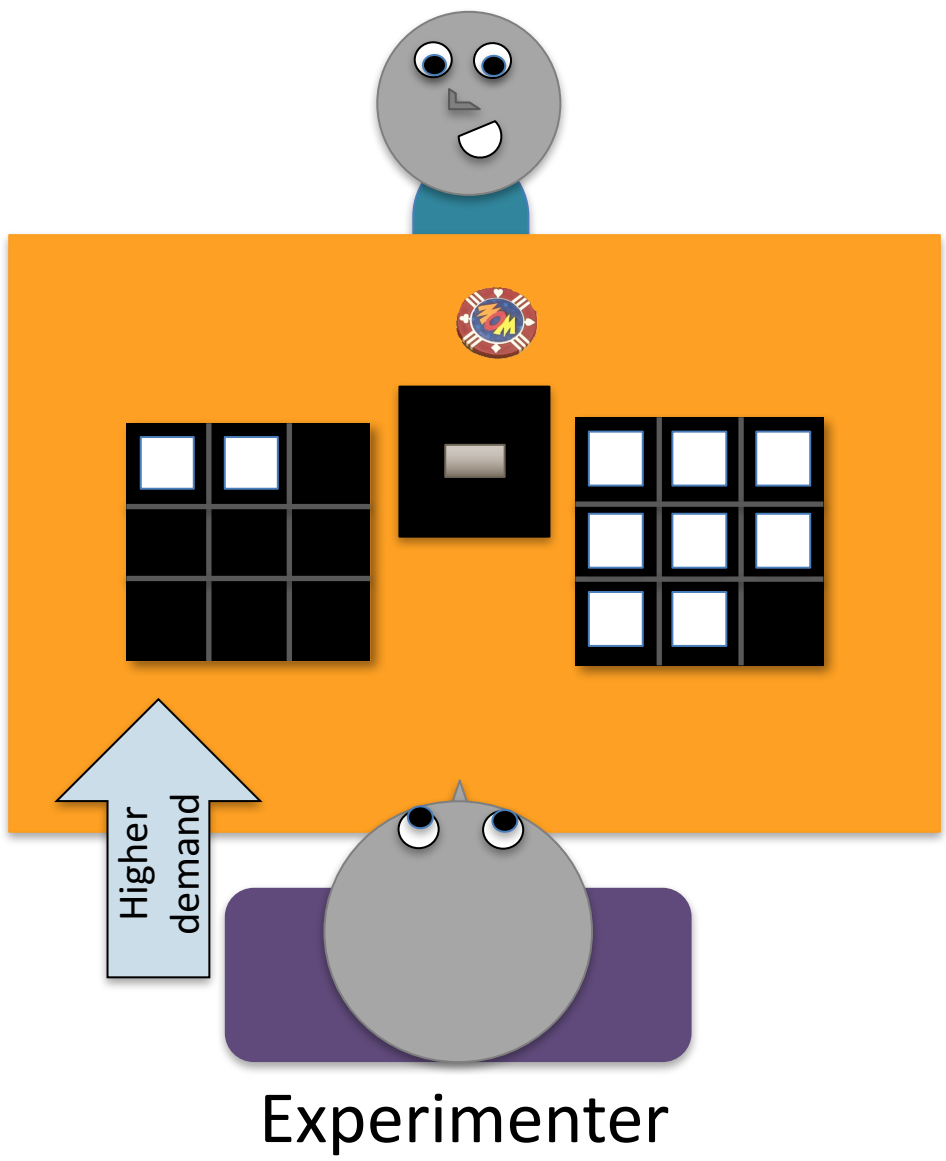
**Participants** 36 4- to 10-year olds (mean age: 6.26 years; 17 girls)

#### Familiarization Trial



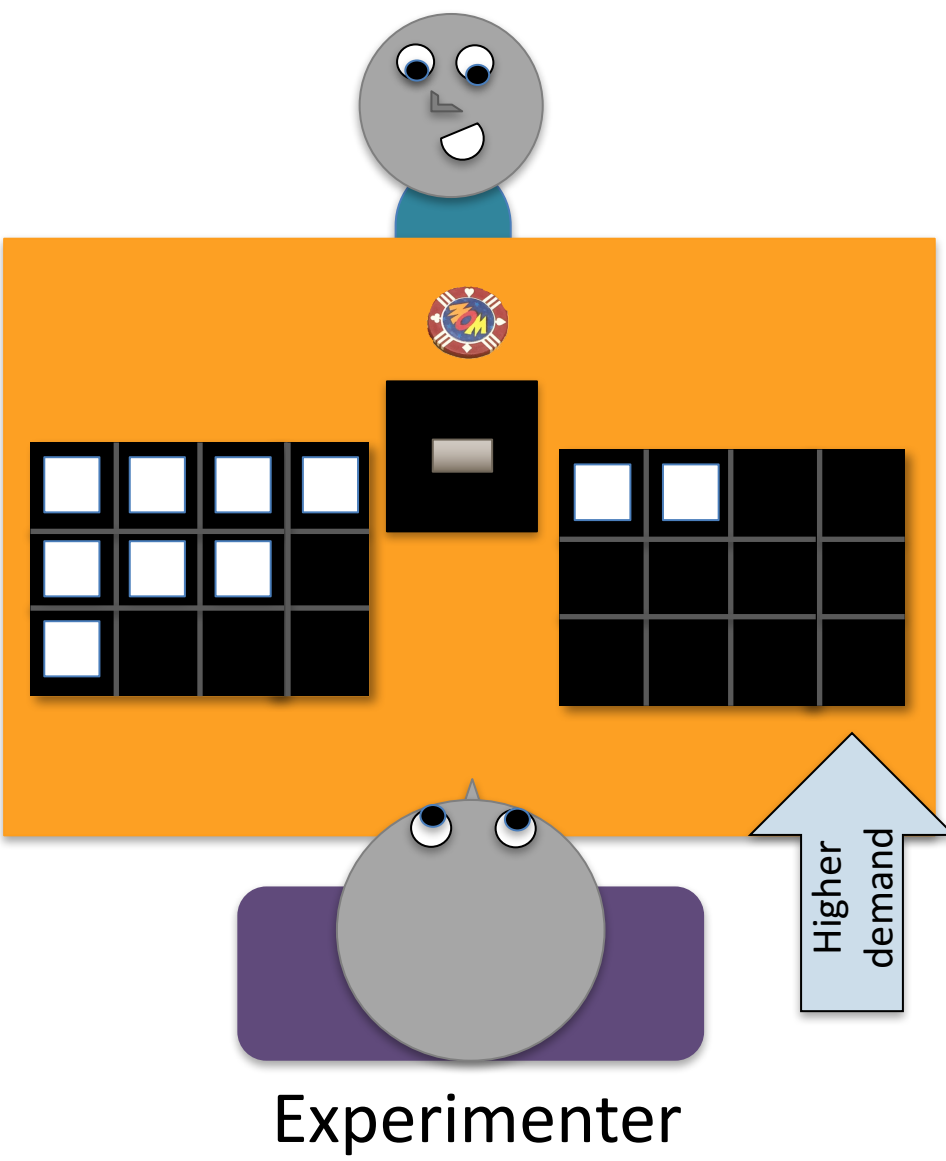
Children were given a token and told they could use it to "buy" a sticker from one of two boxes of face-down stickers.

#### Test Trial 1



**Box Choice:** In two test trials, children were shown two boxes with different numbers of face-down stickers and were told "Some kids were here earlier and they got to see what these stickers looked like, and they got to use their token to buy a sticker from one of these boxes. Which box would YOU like to buy a sticker from?" Order of the trials was counterbalanced across children.  
**Demand Comprehension:** After the test trials, children were asked "Which box do you think the other kids liked better?"

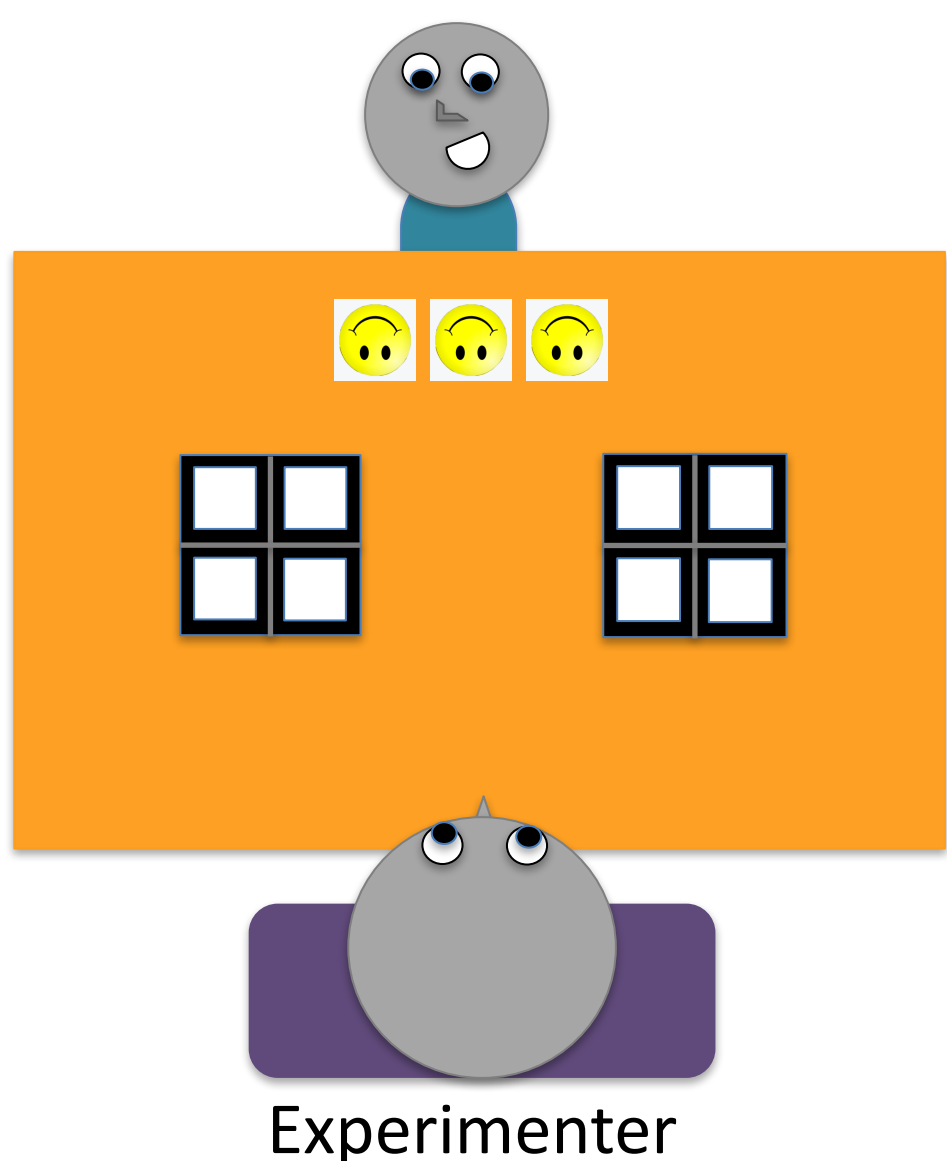
#### Test Trial 2



### High Stakes Condition

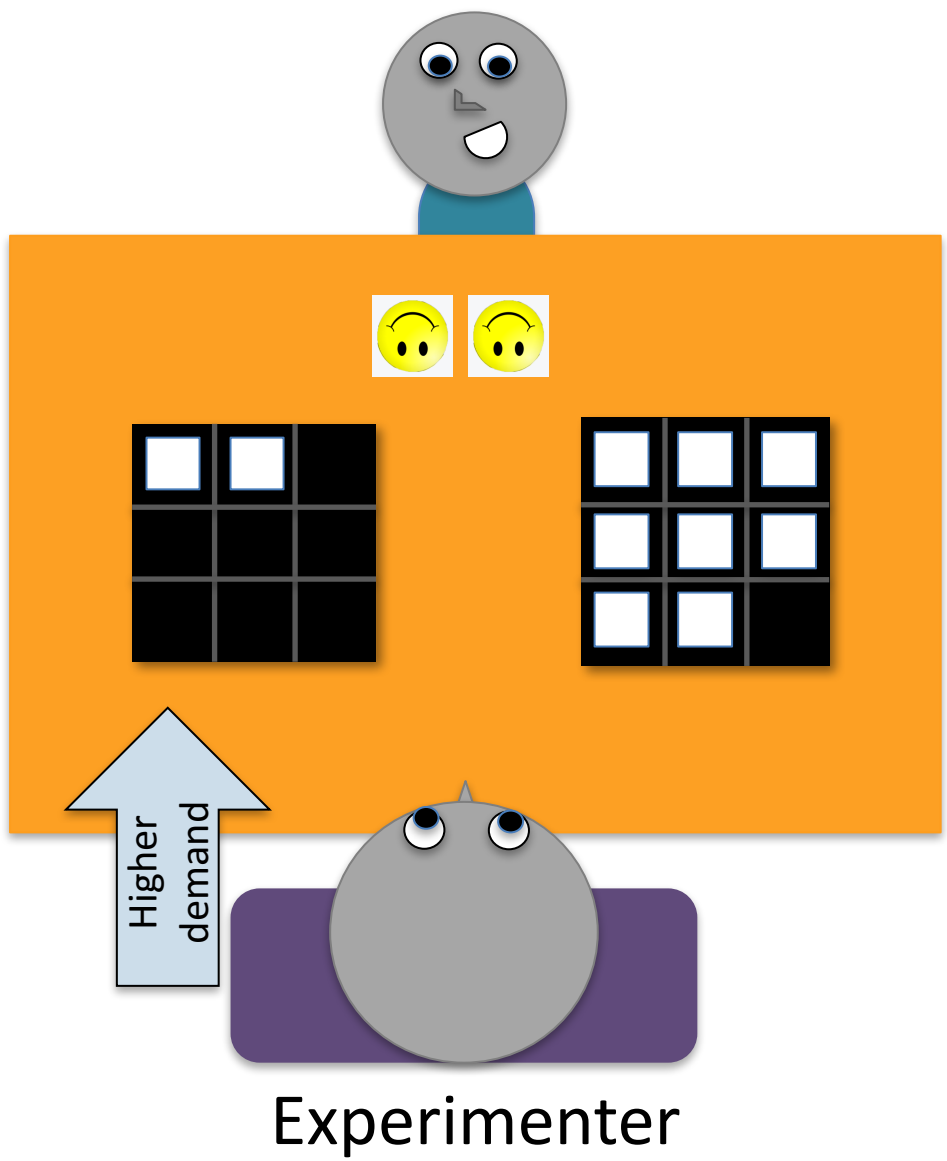
**Participants** 36 4- to 10-year olds (mean age: 6.57 years; 17 girls)

#### Familiarization Trial



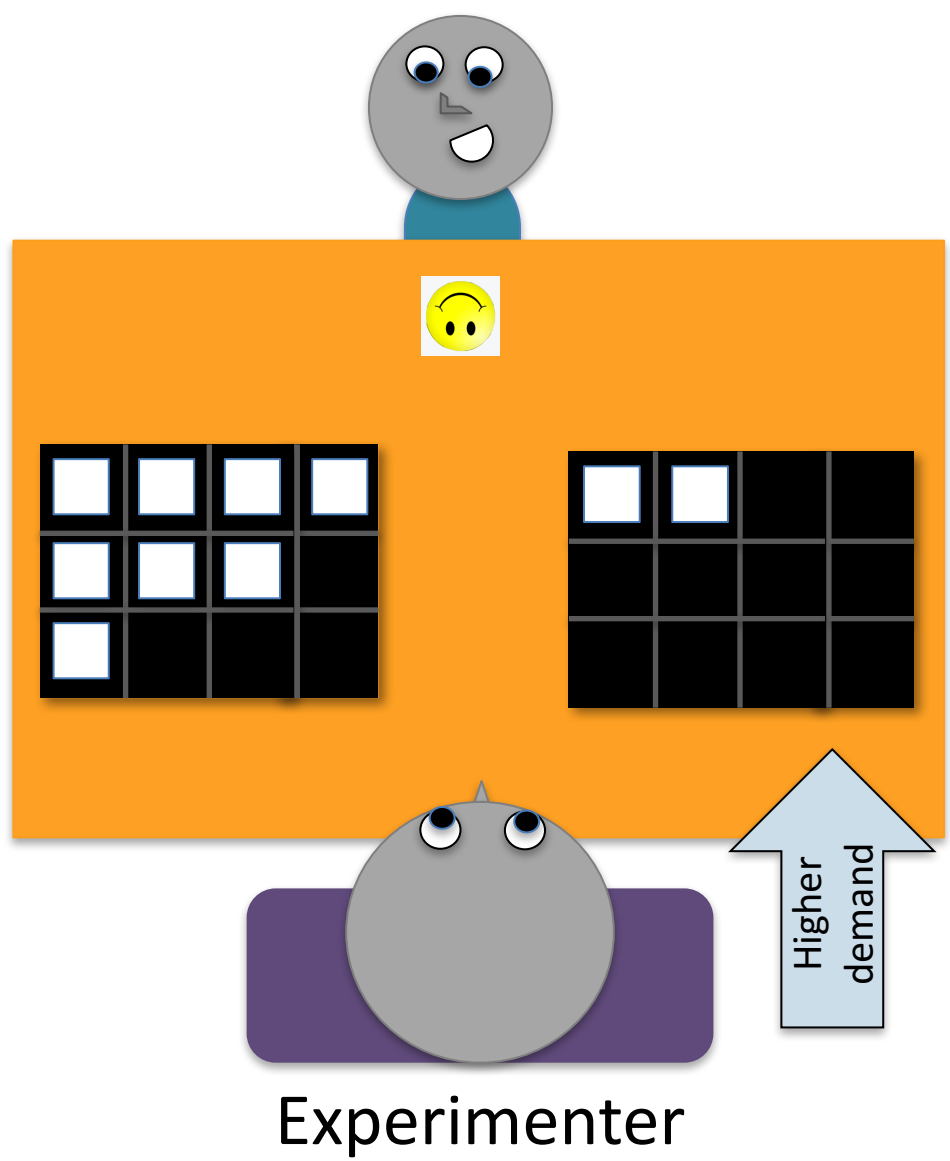
Children were given three stickers and told they could use them to trade for better stickers from one of two boxes of face-down stickers.

#### Test Trial 1

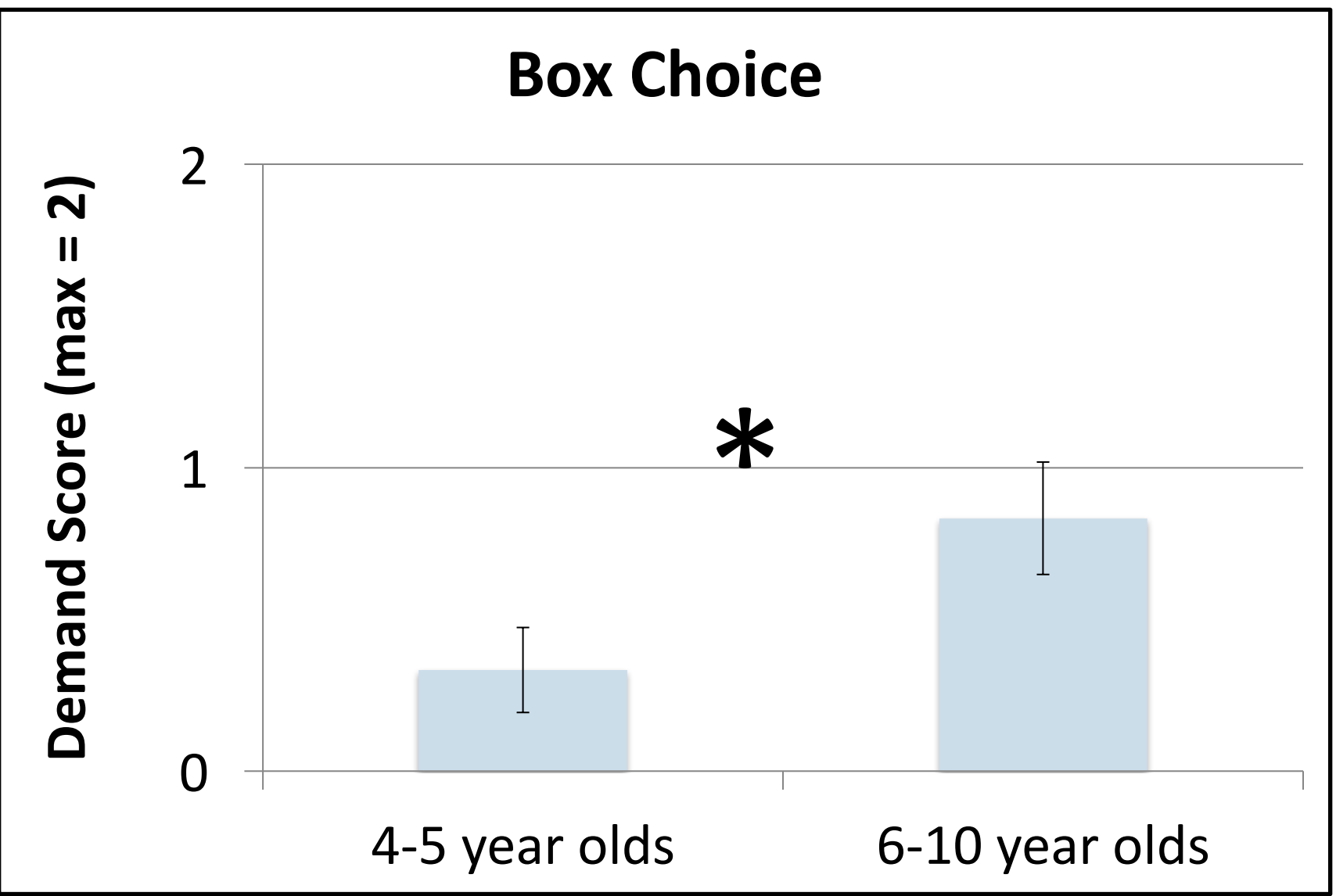


**Box Choice:** In two test trials, children were shown two boxes with different numbers of face-down stickers and were told "Some kids were here earlier and they got to see what these stickers looked like, and they chose to trade their sticker for a better sticker from one of these boxes. Do YOU want to trade YOUR sticker for a better sticker from one of these boxes?...Which box do YOU want to trade with?" Order of the trials was counterbalanced across children.  
**Demand Comprehension:** After the test trials, children were asked "Which box do you think the other kids liked better?"

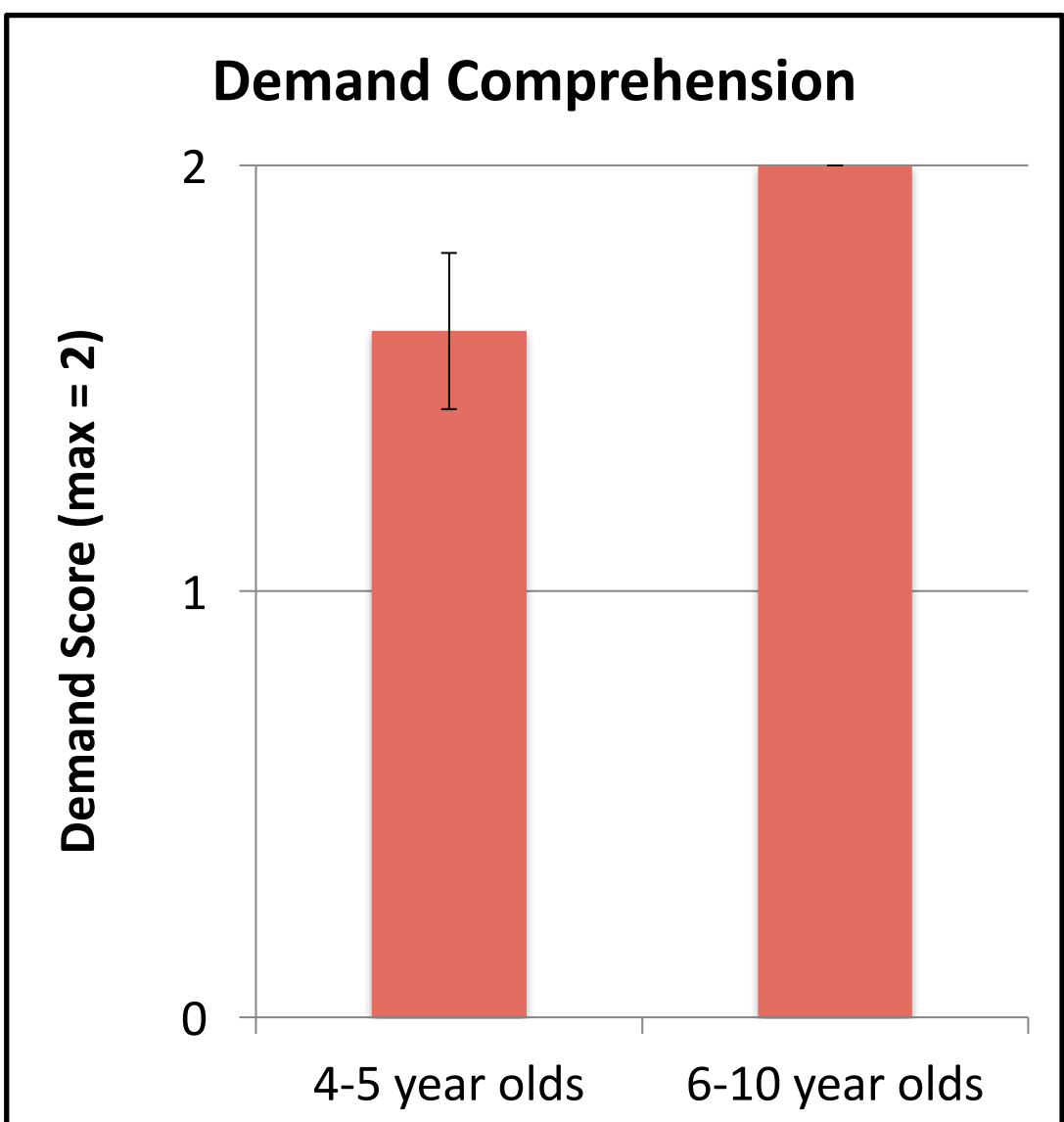
#### Test Trial 2



## Results

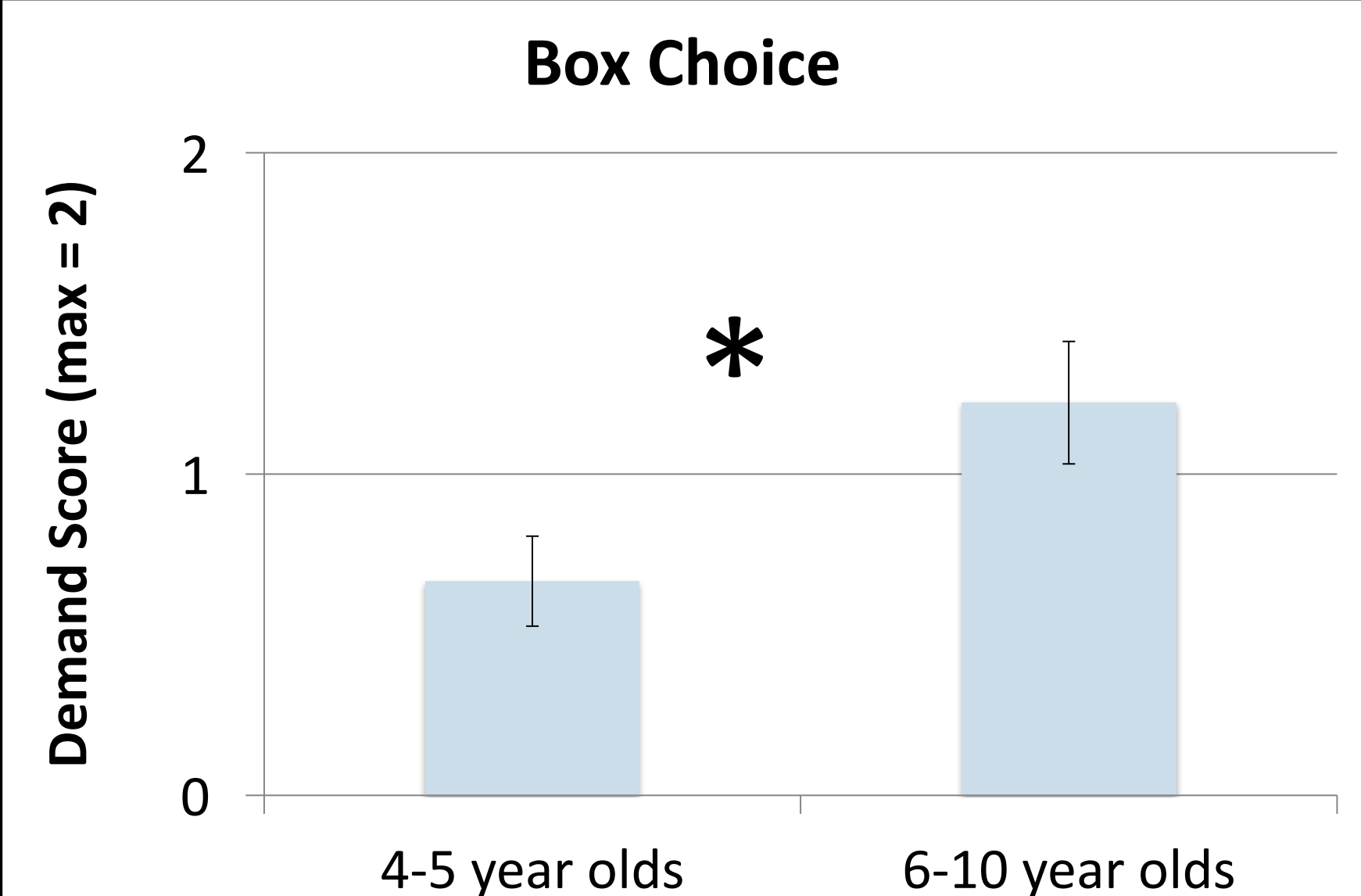


Both age groups are biased toward selecting the box with more stickers, but **older children were significantly more likely to choose the higher demand box versus younger children (p=0.04)**

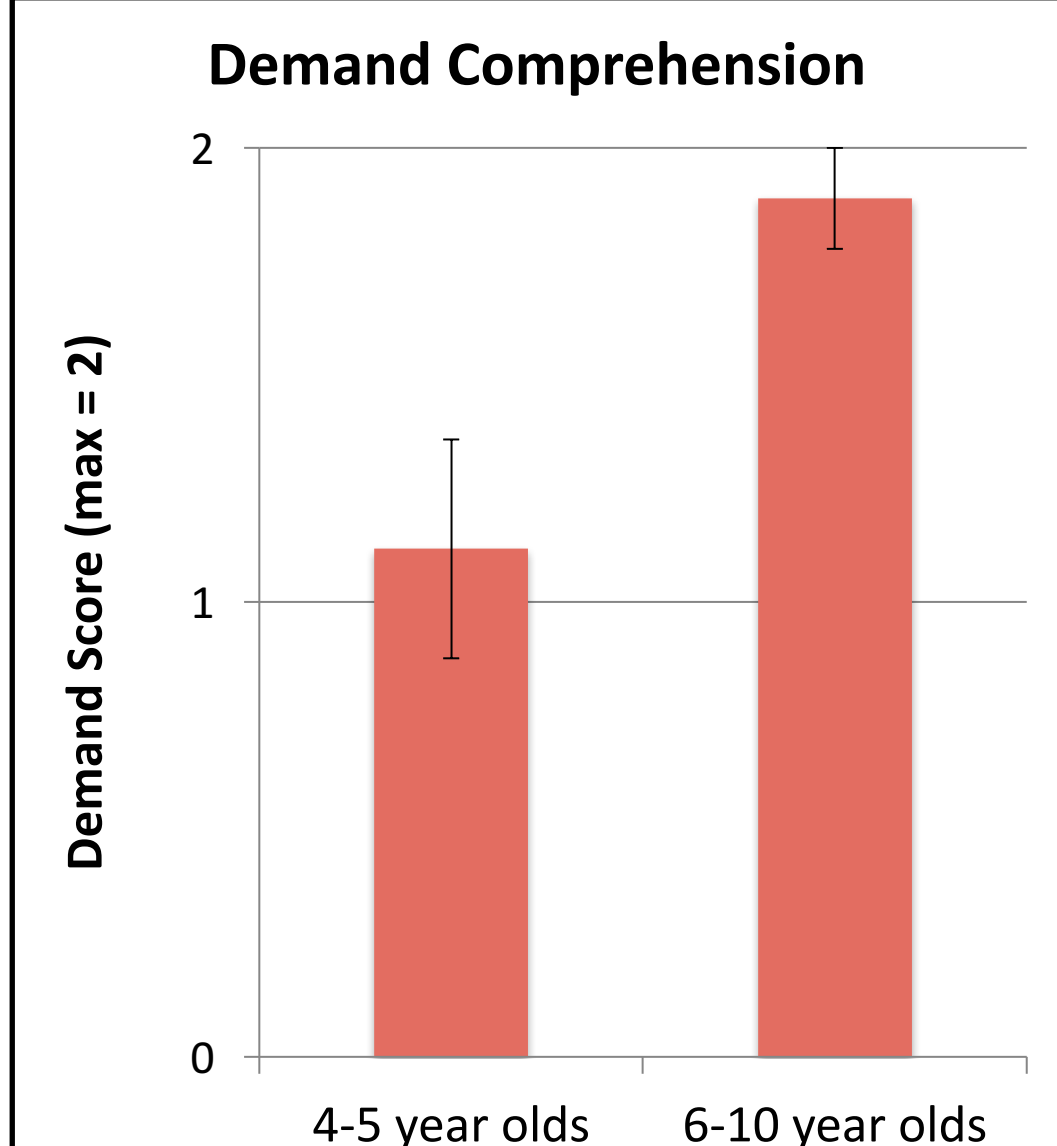


When asked which box other children preferred, both age groups were sensitive to the fact one box was in higher demand than the other.

## Results



Raising the stakes **increased the amount of times both age groups picked the box of a higher demand versus the low-stakes condition (p=0.037).**



Older children continued to be sensitive to demand across conditions, but younger children's understanding may be more fragile.

## Conclusions

Children understand demand principles, but their ability to use these principles varies as a function of both development and decision cost.

## Current Study

### 3<sup>rd</sup> Party Condition

Do children expect others to make decisions based on demand principles?



## References

- <sup>1</sup>Berti, A.E., & Grivet, A. (1990). The development of economic reasoning in children from 8 to 13 years old: price mechanism. *Contributi di Psicologia*, 3, 37-47.
- <sup>2</sup>Leiser, D., & Beth Halachmi, R.S. (2006). Children's understanding of market forces. *Journal of Economic Psychology*, 27, 6-19.
- <sup>3</sup>Siegler R.S., & Thompson, D.R. (1998). Children's understanding of economic causation. *Developmental Psychology*, 34(1), 146-160.
- <sup>4</sup>Thompson, D.R., & Siegler, R. (2000). Buy low, sell high: the development of an informal theory of economics. *Child Development*, 71(3), 660-677.