Study Name: The development of evidence assimilation in a motivated reasoning context – Study 2.
Authors: Prachi Solanki and Zachary Horne
Date: March 6, 2018
Exploratory or Confirmatory: Confirmatory

To examine the underlying mechanism for children's decisions in study 1, we are replicating our prior study with two changes. First, rather than rewarding children with additional stickers we are awarding them with tickets they may use to "buy" a prize after the study is over. We are hoping this causes children to want to maximize the number of tickets they win. It is possible that the prior study did not sufficiently motivate kids because they simply didn't want stickers that much; we didn't really create a motivated reasoning context.

The second change we are making to the study is having children report how many facts they remember as supporting the belief that would yield the greatest number of tickets on a given trial. Our hope is that this memory question will resolve the underlying mechanism of children's behavior in the half condition (discussed below).

Distribution of evidence manipulation – Within-Subjects

The 'None' Condition: Six pieces of evidence that the no-bonus is the Flurp, zero pieces of evidence that the bonus picture is the Flurp. That is, none of the evidence supports choosing the bonus picture.

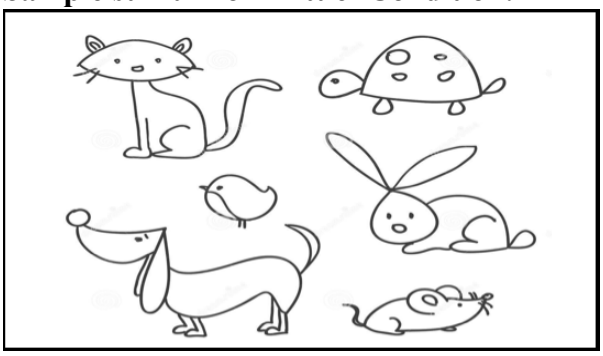
The 'Little' Condition: Five pieces of evidence that the no-bonus is the Flurp, one piece of evidence that the bonus picture is the Flurp. That is, little evidence supports choosing the bonus picture.

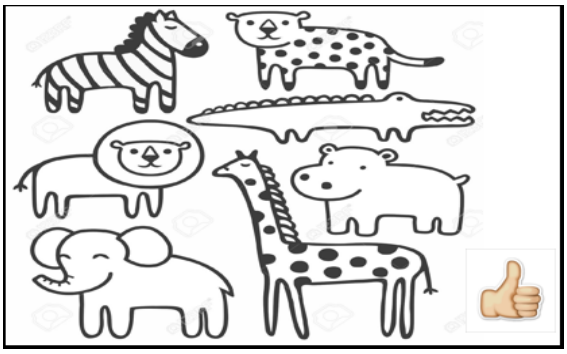
The 'Half' Condition: Three pieces of evidence that the no-bonus picture is the Flurp, three pieces of evidence that the bonus picture is the Flurp. That is, half of the evidence supports choosing the bonus picture.

After each trial in which they decide which picture the Flurp was, children will be asked using a 6-point Likert scale whether they remembered how many pieces of evidence supported the bonus picture. This will help us get an idea of whether children are in fact, misremembering the amount of evidence in a given condition or simply acting in a way that maximizes utility.

Children will not receive feedback about whether they correctly guessed the Flurp, but will be told that they will find out if they were right at the end of the study. In total, the children will be exposed to three trials per condition for a total of nine trials.

Sample stimuli for 'Little' Condition:





It says here that the flurp might have a bird.
It says here that the flurp might have a turtle.
It says here that the flurp might have a cat.
It says here that the flurp might have a rabbit.
It says here that the flurp might have a mouse.
It says here that the flurp might have a lion.

Predictions:

In the None Condition, we predict that children will tend to choose that the no-bonus is the Flurp, even though choosing bonus would yield a larger reward. This finding would replicate of our findings in Study 1.

In the Little Condition, children will behave similarly as in the None Condition, tending to generally follow the evidence by choosing the no-bonus picture. Again, this would be a replication of our prior findings in Study 1.

We are particularly interested in the underlying mechanisms behind children's behavior in the Half Condition. On the one hand, half of the evidence supports the belief that the no-bonus picture is the Flurp. However, children will want the bonus picture to be the Flurp because it would yield more tickets. Because children are given *some* evidence that the bonus picture is the Flurp, we expect their choices to reflect a maximization of utility despite equal evidence for both pictures.

Prediction regarding memory task:

We predict that children's memory for the evidence will predict their choices. Children who remember more evidence for a given picture will tend to have chosen that picture. However, we will examine whether children remember there being more support for the bonus picture than there is in the half condition. We are unsure what will happen but hope that it will resolve the mechanism underlying children's behavior in the half condition.