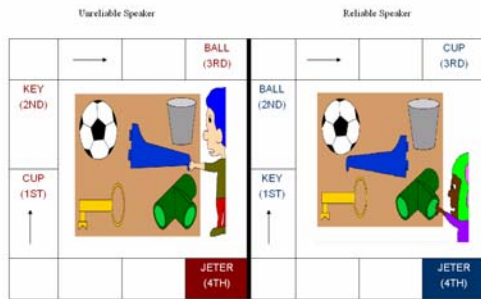


### Introduction

- Children often trust a speaker's testimony when learning a new word.
- Children do not passively trust the testimony of any speaker but prefer to trust speakers that are known to be reliable.
  - Koenig, Clement, and Harris (2004) found that children track, use, and retain information about a speaker's reliability when learning a new word.
- We conducted 3 studies:
  - Study 1 examines word learning from known speakers.
  - Study 2 examines word learning from unknown speakers.
  - Study 3 examines word learning over a 24-hour delay.

### Study 1 - Method

- Participants
  - 3-year-olds (N = 26, M = 39 months)
  - 4-year-olds (N = 25, M = 54 months)
- Procedure
  - Speaker 1 **reliably** labeled 3 known objects and then labeled an unknown target (i.e., Target 1) with the new word.
  - Speaker 2 **unreliably** labeled 3 known objects and then labeled a different unknown target (i.e., Target 2) with the new word.
  - Participants were shown both targets (i.e., Target 1 and 2) and asked to select the one that corresponded to the new word.



### Study 1 - Results

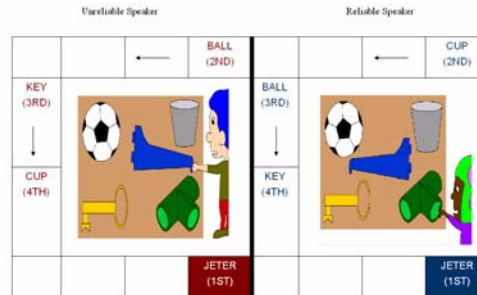
Table 1: Trusting the Reliable and Unreliable Speaker

	3-yr-olds	4-yr-olds	Totals
Reliable	19	22	41
Unreliable	7	3	10
Totals	26	25	51

- Children trusted the known, reliable speaker (i.e., 41/51) ( $p < .01$ ).
- Both 3-year-olds (i.e., 19/26) ( $p < .05$ ) and 4-year-olds (i.e., 22/25) ( $p < .01$ ) trusted the reliable speaker.
- Trust was unaffected by whether Speaker 1 or Speaker 2 was reliable or unreliable.

### Study 2 - Method

- Participants
  - 3-year-olds (N = 20, M = 42 months)
  - 4-year-olds (N = 23, M = 53 months)
- Procedure
  - Speaker 1 labeled an unknown target with the new word.
  - Participants shown two targets and asked to select the one that corresponded to the new word (i.e., Time 1).
  - Speaker 1 **reliably/unreliably** labeled 3 known objects.
  - Speaker 2 **reliably/unreliably** labeled 3 known objects.
  - Speaker 2 labeled an unknown target with the new word.
  - Participants again shown the two targets and asked to select the one that corresponded to the new word (i.e., Time 2).



### Study 2 - Results

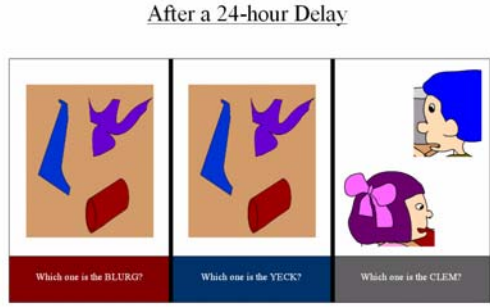
Table 2: Target Object Selection (When Speaker 1 Proves Unreliable)

	Reliable		Unreliable		Totals (Unreliable)
	3-year-olds	4-year-olds	3-year-olds	4-year-olds	
Time 1	9/9	10/10	10/11	13/13	23/24
Time 2	8/9	10/10	8/11	6/13	14/24
Change	1/9	0/10	2/11	7/13	9/24

- 3's (i.e., 19/20) and 4's (i.e., 23/23) trusted the unknown speaker.
- When Speaker 1 proved reliable, there was no change.
- When Speaker 1 proved unreliable, change varied by age:
  - 10/11 3's trusted the unknown speaker, 2/11 changed ( $p = .25$ ).
  - 13/13 4's trusted the unknown speaker, 7/13 changed ( $p = .016$ ).

### Study 3 - Method

- Participants
  - 4-year-olds (N = 14, M = 53 months)
- Procedure
  - Same as Study 2; but participants who changed their target selection completed a 24-hour delay.
    - After delay, participants were again shown the two targets and asked to select the one that corresponded to:
      - a) the original word.
      - a new word (presented by a new speaker).
      - a 2nd new word (presented by the reliable and unreliable speakers).



### Study 3 - Results

Table 3: Target Object Selection - 24-hour Delay

BLURG	9/14	5/14	0/14
YECK	1/14	3/14	10/14
CLEM	6/7	1/7	

- 4s retained the reliable speaker's word ( $p = .014$ ), assigned the new word to the new object ( $p = .003$ ), and trended toward trusting the reliable speaker after a delay ( $p = .059$ ,  $N = 7$ ).

### Conclusions

- Study 1** found that:
  - 3- and 4-year-olds **trusted reliable speakers** over unreliable speakers (necessitating replicating Eising et al., 2004).
- Study 2** found that:
  - 3- and 4-year-olds **trusted unknown speakers**.
  - 4-year-olds **reversed trust** when speakers prove unreliable.
- Study 3** found that after a 24-hour delay:
  - 4-year-olds **retained the reliable speaker's word**.
  - 4-year-olds assigned the new word to the new object.
  - 4-year-olds continued to trust the reliable speaker.
- Overall*, these three studies found that speaker reliability affected 4-year-olds both **before and after** word learning occurred and that the affects remained after a 24-hour delay.