

More than True: Developmental changes in the use of inductive strength for selective trust

Asheley R. Landrum^{1,2}, Joshua Cloudy², & Patrick Shafto^{2,3}

¹University of Pennsylvania, ²University of Louisville, ³Rutgers University--Newark

INTRODUCTION

- Much of what we learn comes from other people. Depending on an informant's knowledgeability and intentions, information can range from accurate and helpful to inaccurate or even misleading. So, it is important to evaluate an informant's trustworthiness.
- Research shows children are generally able to evaluate informant's trustworthiness based on **characteristics of that informant**, such as expertise or niceness (Landrum et al., 2013; Landrum et al., 2015).
- Children are also able to evaluate informant's trustworthiness based on **the information they present**, such as whether they have previously presented accurate information (e.g., Koenig & Harris, 2005).
- Less is known about how children consider the **quality of the information**, such as the typicality or diversity of examples (Rhodes et al., 2008).

Current Research

The current research examines developmental variation in the use of example quality—typicality and diversity—for evaluating informants.

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STUDY DESIGN

Participants

86 children (ages 4 to 14) from the Kentucky Science Center and 40 adults from Amazon Mechanical Turk

METHOD

Children were randomly assigned to either the **typical condition** or the **diverse condition**.

Both conditions had three parts: the endorsement trials, the ask trials, and the explicit rating items.

- I. Endorsement Trials:** There were four endorse trials. For each trial, the informants presented a set of examples which children were asked to choose between. In the **diverse condition**, one informant presented a diverse set of examples (e.g., three different dogs) and the other presented a homogenous group of examples (e.g., three golden retrievers). In the **typical condition**, one informant presented a typical example (e.g. blue jay) and the other one presented an atypical example (e.g., penguin).

Diverse Condition



Typical Condition



- II. Ask Trials:** There were four ask trials. For each trial, children had to choose which person they would prefer to ask for a new example/set of examples. The informants did not present any information during these trials.

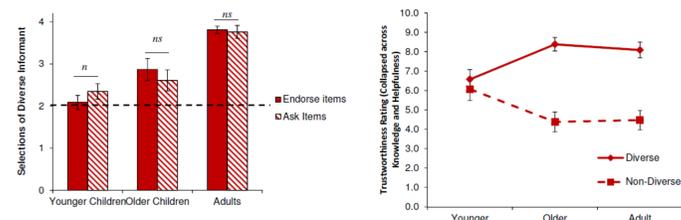
- III. Explicit Rating Items:** Children were asked to rate each informant on two dimensions: knowledgeability and helpfulness. These ratings used a sliding scale (allowing for 2 decimals) from 0 to 10.

Knowledgeability: How much do you think [this informant] knows about animal insides?

Helpfulness: How helpful do you think [this informant]'s examples were.

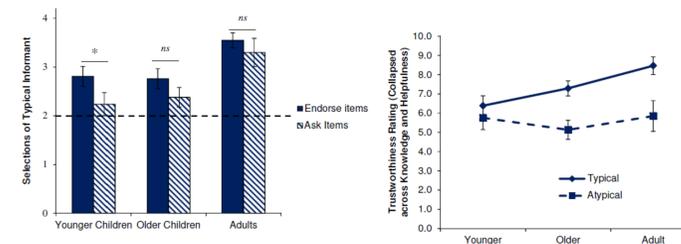
RESULTS

Example Diversity



- Adults selected the diverse informant more often than both younger ($p < .001$, $d = 3.78$) and older children ($p < .001$, $d = 1.20$).
- Only older children and adults endorsed the diverse informant above chance levels. Similarly, older children and adults asked the diverse informant above chance levels, and the younger children trended towards doing so.
- Participants rated the diverse informant as more trustworthy than the non-diverse informant ($p < .001$, $\eta^2 = .367$). Unlike the typical condition, however, this effect did vary by age, $F(2, 64) = 6.34$, $p = .003$, $\eta^2 = .165$.
- Older children and adults saw the diverse informant as significantly more trustworthy than the non-diverse informant, but younger children did not.

Example Typicality



- The youngest age group endorsed the typical informant for examples more often than they requested new examples from him: ($p = .036$, $d = .56$).
- Adults selected the typical informant more frequently than both younger children ($p = .002$, $d = 1.09$) and older children ($p = .004$, $d = 1.09$).
- All age groups endorsed the typical informant above chance levels. In contrast, only adults asked the typical informant above chance levels, while older children trended towards doing so.
- Adults gave the informants higher ratings than younger children ($p = .039$, $d = 0.55$) and trended towards doing so compared to older children ($p = .087$, $d = 0.66$). Younger children's and older children's ratings did not differ from one another significantly ($p = 1.00$, $d = 0.07$).

CONCLUSIONS

- Our results show that, whereas young children are not reliably using example typicality and diversity when determining whom to trust, older children seem to be in the middle of a developmental transition.
- Older children are either above chance or trending toward preferring the informant providing **qualitatively stronger** examples, and they explicitly rate those informants as more trustworthy.
- Thus, we find a similar developmental pattern to Rhodes et al (2008) where around 9 years of age, children are beginning to consider the benefits of typical and diverse examples.
- However, our work takes a step further—demonstrating that in addition to recognizing the benefits of typical and diverse examples, children around 9 years of age can leverage example quality to evaluate informants' trustworthiness

References

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For more information contact
LandrumAR@gmail.com