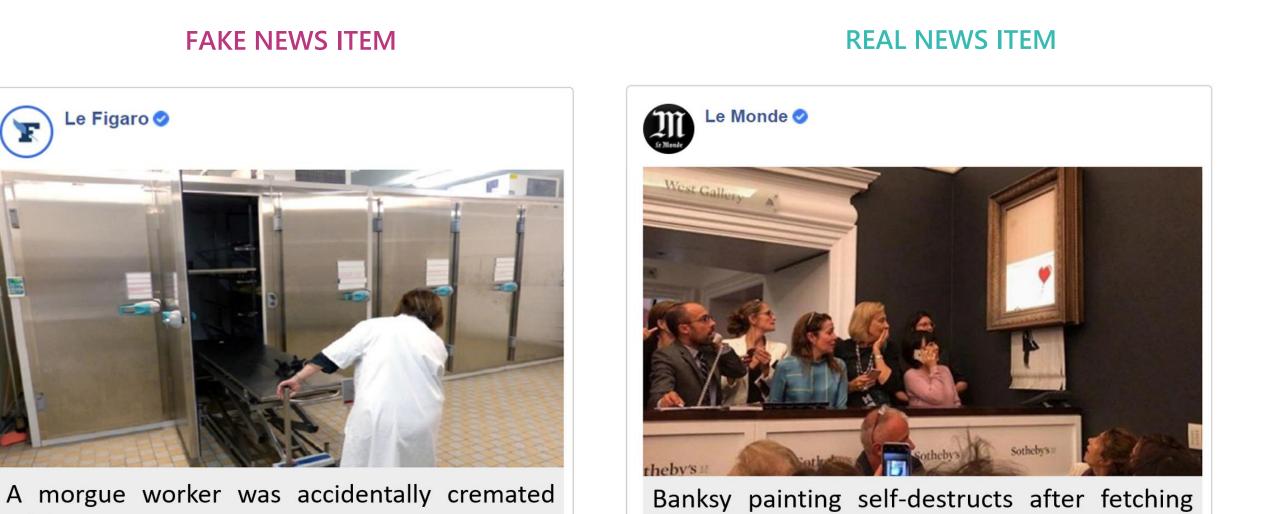
DEVELOPMENT OF FAKE NEWS DETECTION DURING ADOLESCENCE

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BACKGROUND & OBJECTIVES

- Although previous studies in adults converged to show that the ability to differentiate between fake and real news involved to overcome reasoning biases (Pennycook & Rand, 2019), no study has investigated how media truth discernment develops during adolescence.
- The familiarity of news stories such as their repetition on social media – increases their perceived accuracy. This effect, known as the **Illusory truth effect**, has been observed in children (Fazio et al., 2015) and adults (Pennycook et al., 2018), but should be explored during



\$1.4 million at Sotheby's

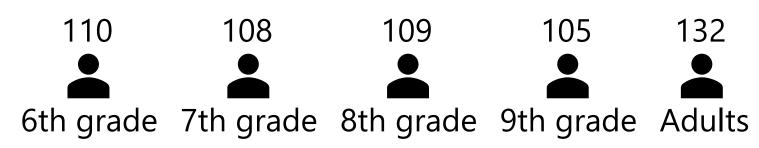
The enigmatic artist's "Girl With Balloon" sold for \$1.4 million

adolescence.

- In this sutdy, we investigated :
 - the development of media truth discernment from adolescence to adulthood
 - the role of the resistance to cognitive biases in 2 fake news detection
 - the effect of familiarity (illusory truth effect) of the 3 news on the perceived accuracy

METHOD

564 participants :



• Online Tasks : Illusory truth effect paradigm (Pennycook et al., 2018), cognitive reflection test (CRT, Frederick, 2005), syllogisms (Evans et al., 1983)

While he was sleeping, another employee mistook him for the corpse of a 52-year old car accident victim and carried him to the

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) Like	Comment	🖨 Share	

The enginate artist's On With Dalloon Sold for \$1.4 million
before being shredded by a rigged frame at Sotheby's auction
house in London on Friday.

Like	📿 Comment	🖨 Share

How accura	ate do you find	this informati	on above ?
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Example of news headlines used during the experiment

Familiarization stage

while napping

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Distractor

Assessment

stage



DV : Interest level rating Half fake news – Half real news 28 items

Demographic questions

DV : perceived accuracy rating 28 familiar news + 28 novel news Half fake news – Half real news

Familiar news

A Novel news

Familiar news

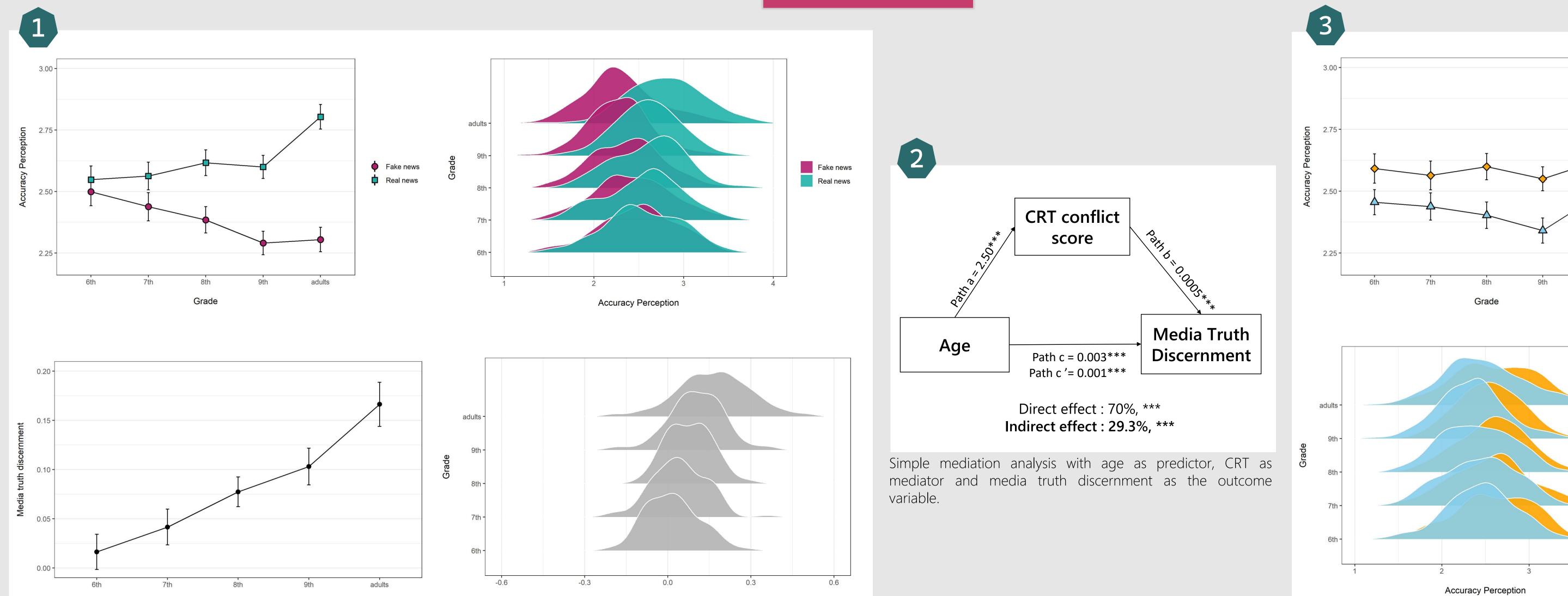
Novel news

 Illusory truth effect = Familiarized - Novel items Media truth discernment =

Real news - Fake news

The three stages of the illusory truth effect paradigm

RESULTS



Grade

Media truth discernment

Perceived accuracy means of real news and fake news per group and distributions (top). Media truth discernment means per group and distribution (bottom). All error bars indicate 95% confidence intervals.

Perceived accuracy means of familar and novel news per group and distributions. All error bars indicate 95% confidence intervals.



Media truth discernment develops linearly with age during adolescence

2 The relation between age and media truth discernment is partially mediated by the ability to overcome biased responses

The illusory truth effect exists at all age given that familiar news were perceived as more accurate than novel news 3

Taken together, these results could provide new cues to help the development of media truth discernment in adolescence through specific pedagogical interventions.



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