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DEVELOPMENT OF FAKE NEWS DETECTION DURING ADOLESCENCE

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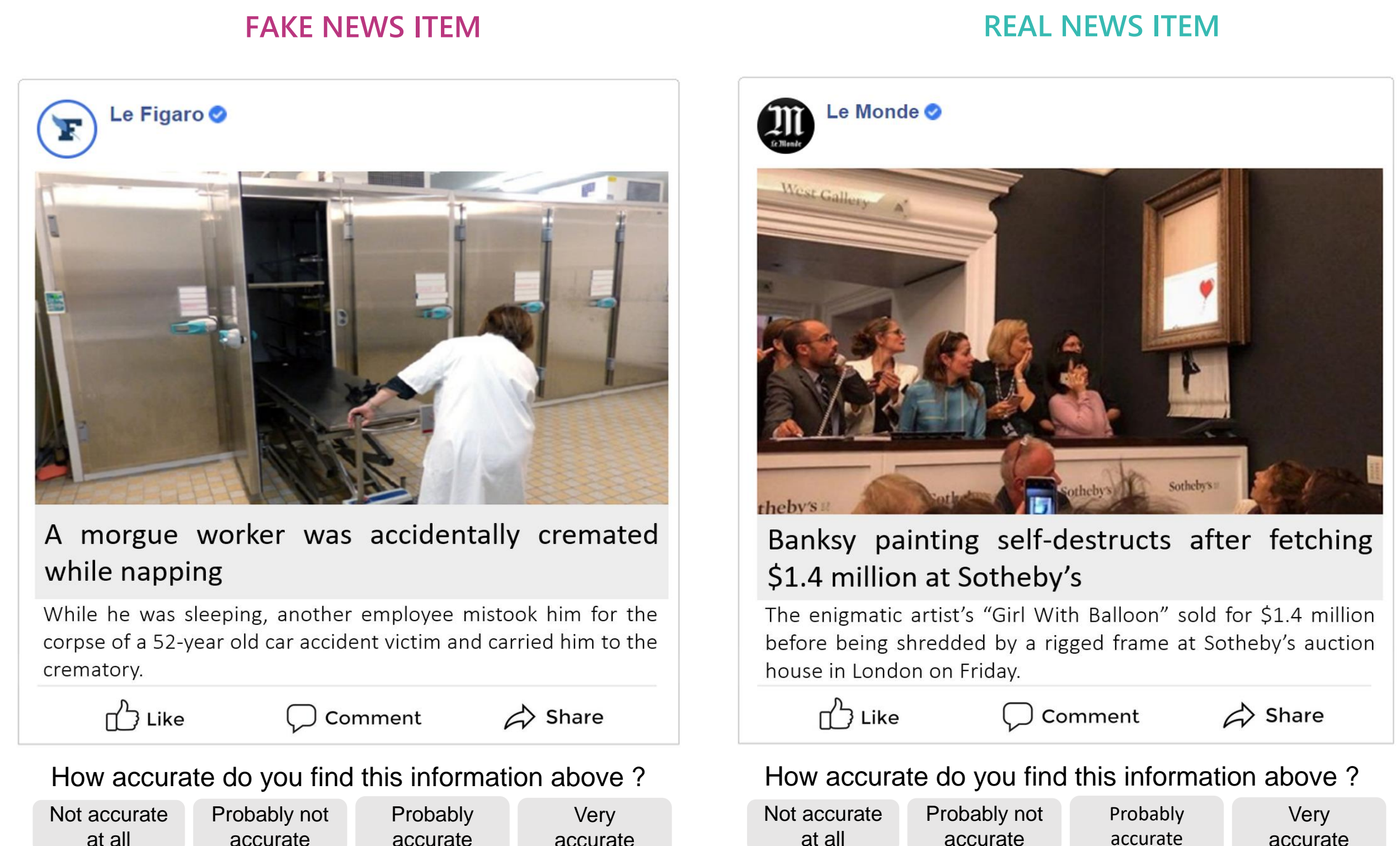
BACKGROUND & OBJECTIVES

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

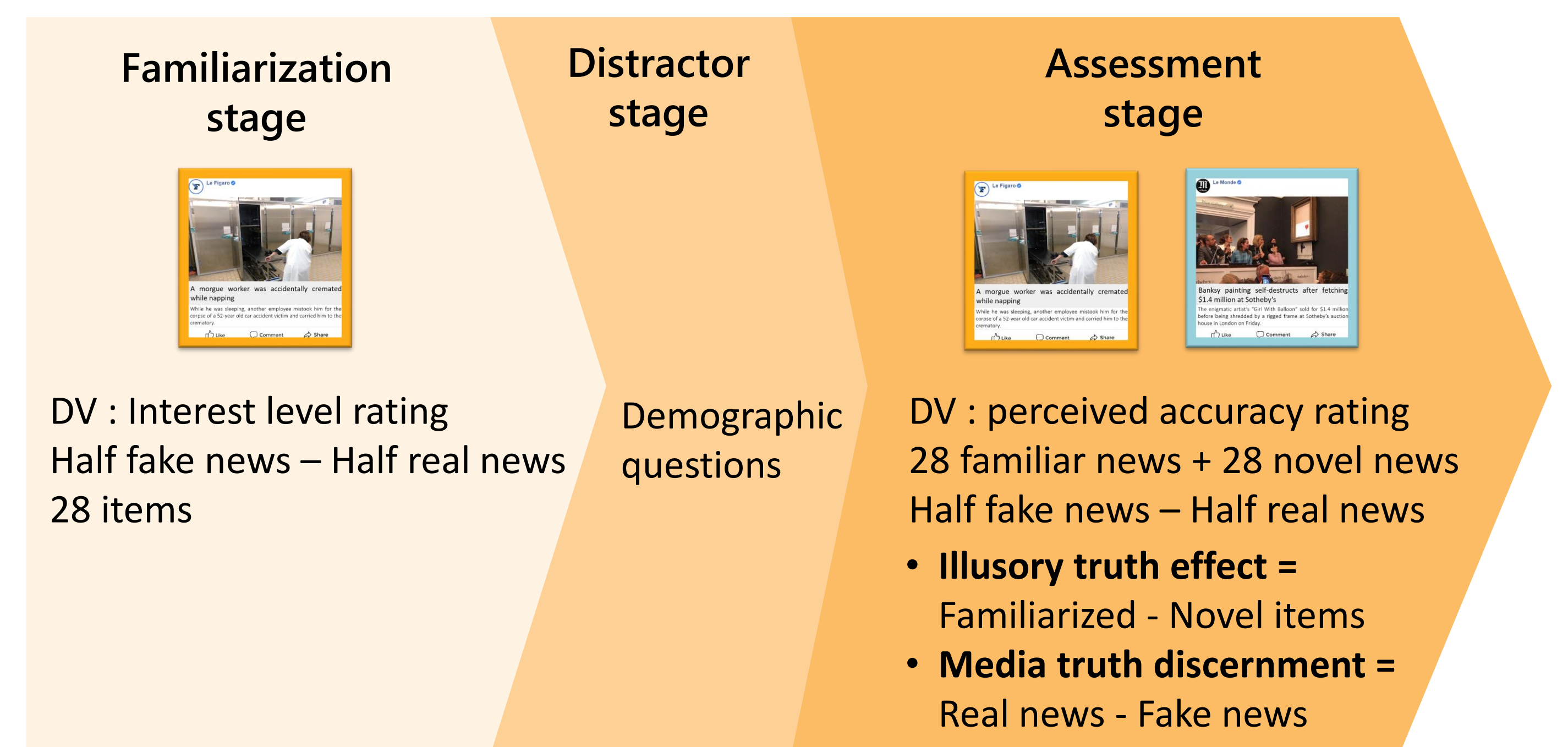
METHOD

- 564 participants :

Grade	Participants
6th grade	110
7th grade	108
8th grade	109
9th grade	105
Adults	132
- Online Tasks** : Illusory truth effect paradigm (Pennycook et al., 2018), cognitive reflection test (CRT, Frederick, 2005), syllogisms (Evans et al., 1983)

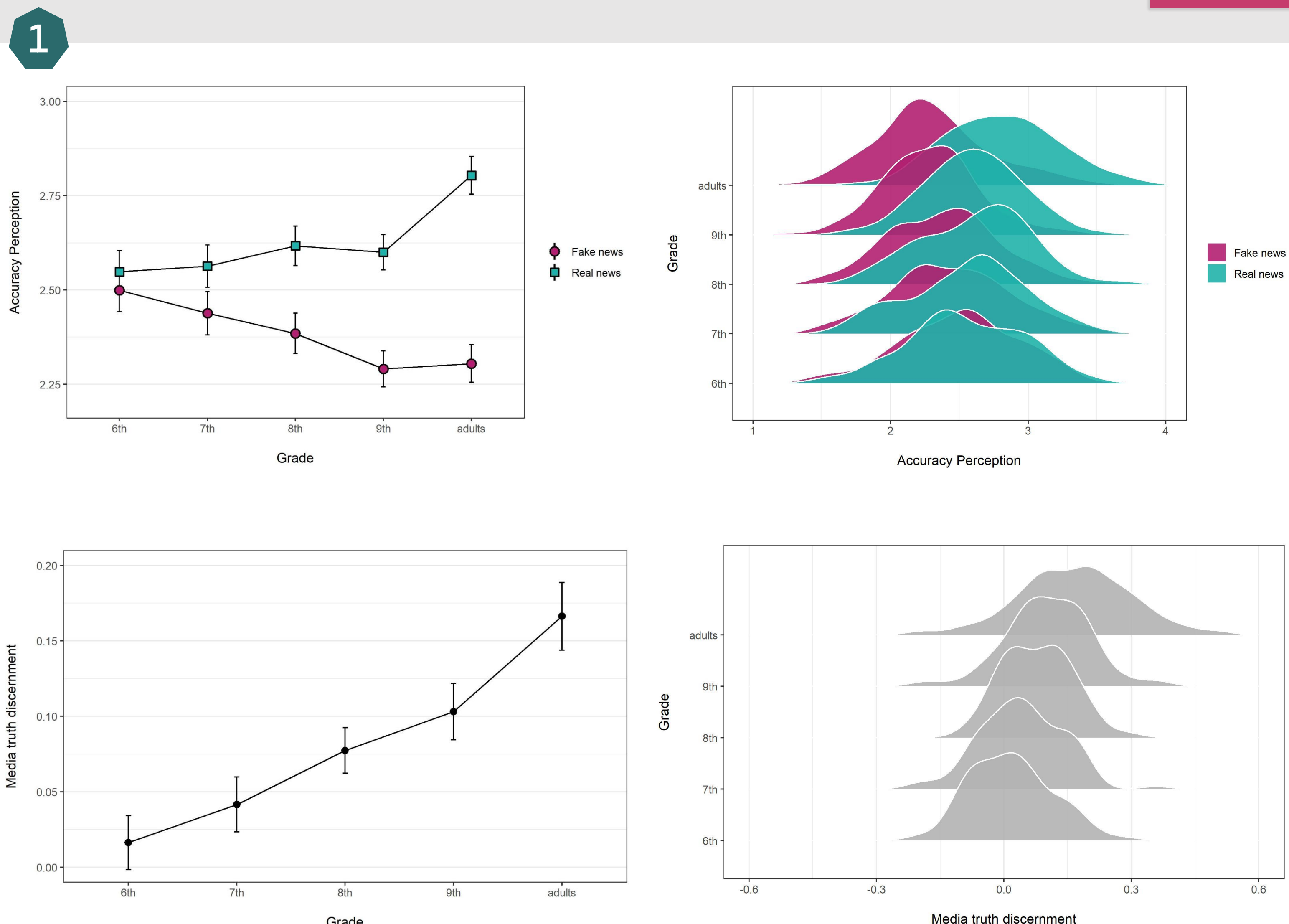


Example of news headlines used during the experiment

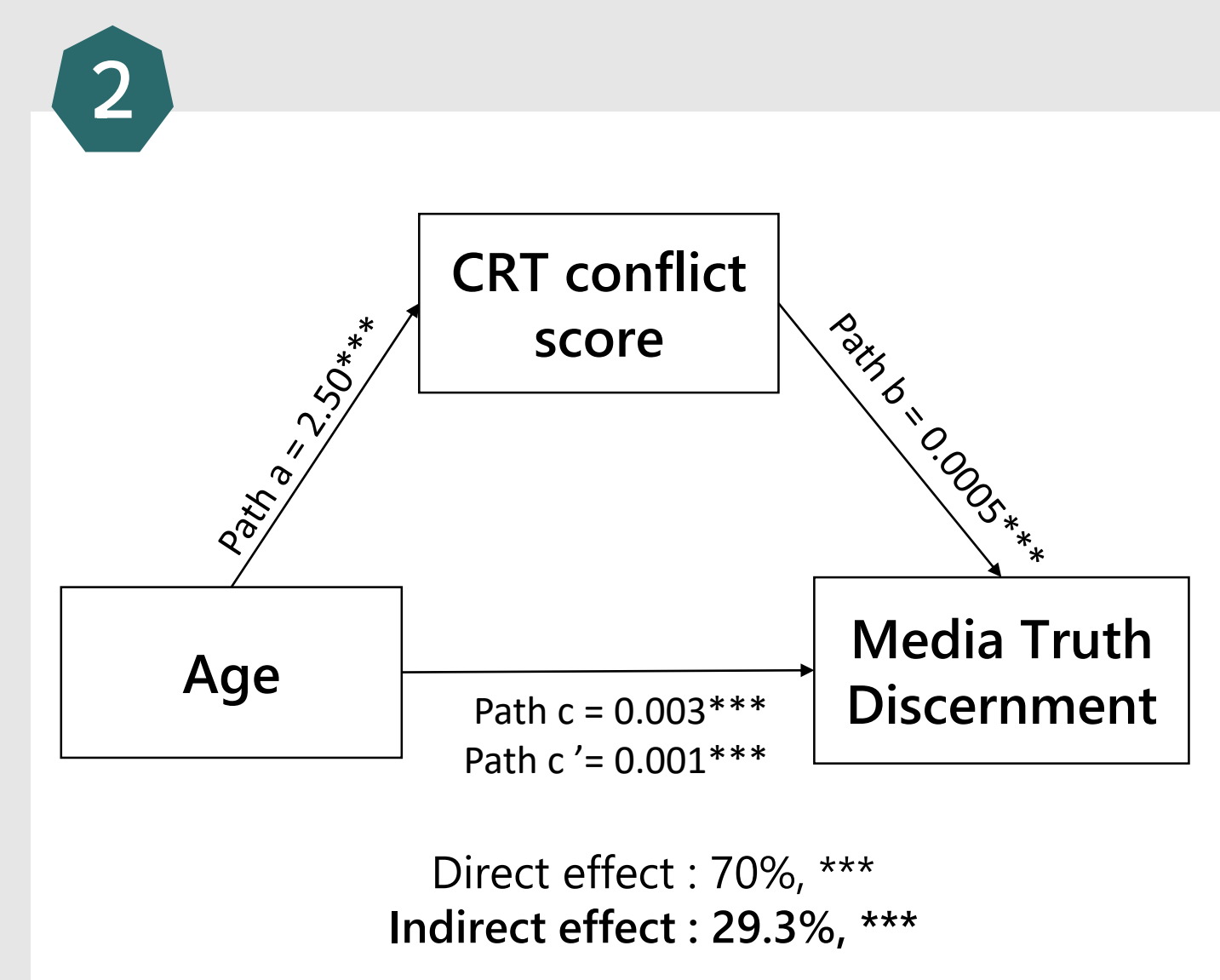


The three stages of the illusory truth effect paradigm

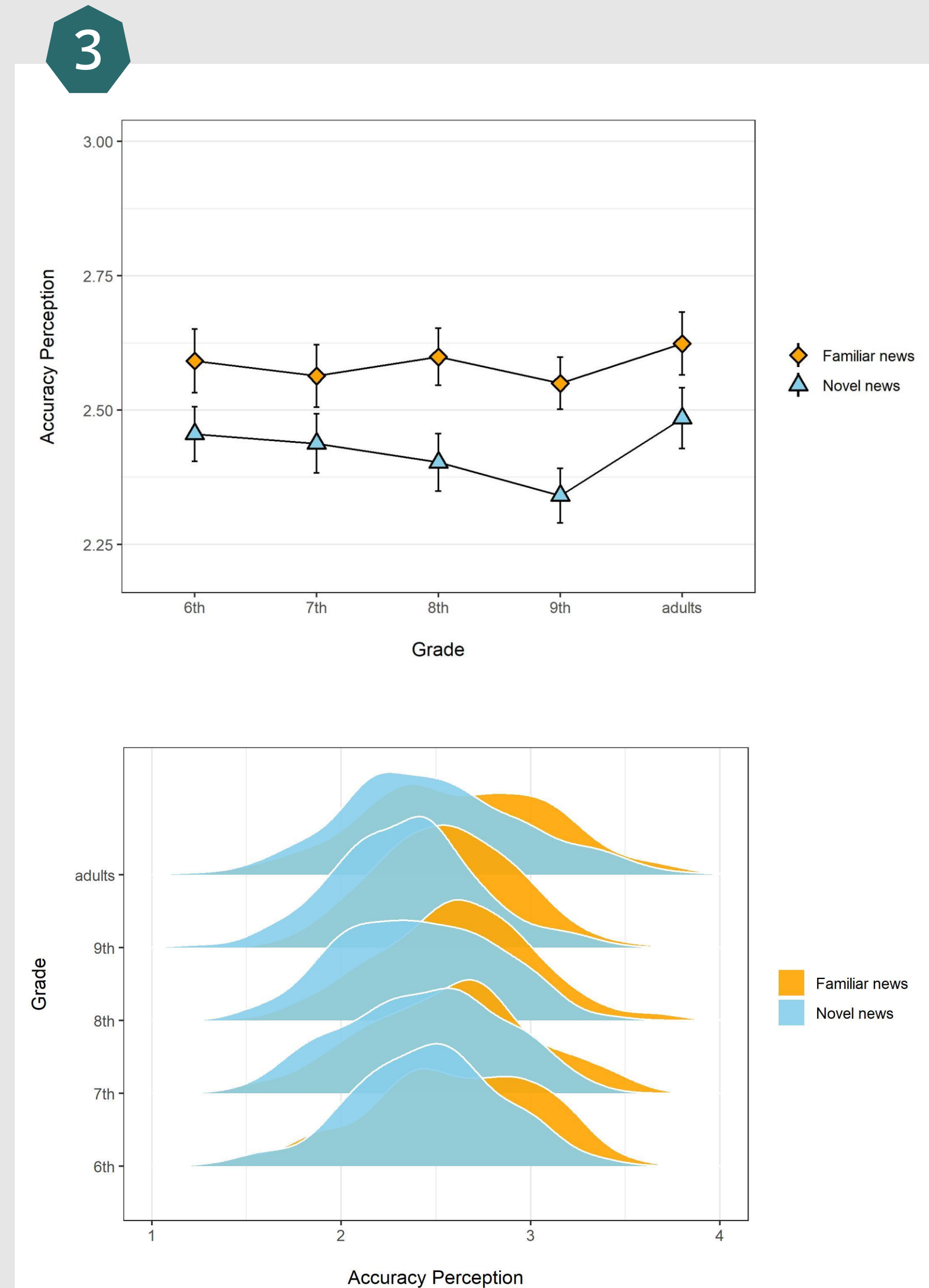
RESULTS



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.



Simple mediation analysis with age as predictor, CRT as mediator and media truth discernment as the outcome variable.



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

CONCLUSION

- Media truth discernment develops linearly with age during adolescence
- 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

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