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PSYCHOLOGY BEING INVESTIGATED

EYEWITNESS TESTIMONY
Memory distortion can lead to incorrect memories & inaccuracies in eyewitness testimony, despite the importance of accurate information in police investigations & legal proceedings.

FP RESPONSES
Forensic researchers ask Ps to identify the culprit from a group of people, called a "line-up": TPLU, TALU. In a TPLU: correct identification, FPs (choosing a wrong foil) & FNs (saying the culprit isn't there). In TA: the Ps are correct if they choose a FN but may still make a FP response.

BACKGROUND

LINE-UPS & IDENTIFICATION
Pozzulo's research focuses on developing evidence-based, age-appropriate techniques for working with child witnesses to reduce wrongful convictions. Witnesses view a line-up consisting of a suspect & a few foils, who look similar to the suspect. Different formats, such as live line-ups & photographs, are used, allowing simultaneous or sequential viewing.

CHILDREN AS WITNESSES
Pozzulo's meta-analysis reveals that children as young as five are accurate in rejecting TALUs, but as old as 13 struggle. Social influence & the desire to please the interviewer are key factors affecting accuracy, as children perceive authority figures as foils.

AIMS
This study aimed to explore the role of social & cognitive factors in children's identification of target faces in line-ups. Specifically, they aimed to investigate whether children:
- are less able to recognise human faces than adults
- make more FP identifications than adults when faced with:
  o TALUs versus TPLUs
  o human faces & cartoon characters.

RESEARCH METHODOLOGY

DESIGN & VARIABLES [LAB EXPERIMENT]
IV1: age: young children or adults [independent measures; compares data from diff people]
IV2: target faces: familiar cartoon characters/unfamiliar human faces [repeated measures]
IV3: line-up type: TP or TA [repeated measures]
4 videos [Diego, Dora, M&F actor] & the order of targets &/or foils were r&omised for each Ps to minimise order effects.

SAMPLE
Children: 4-7 y/o, 21F, 38M, avg: 4.98 yrs, SD: 0.82. From pvt schools in eastern Ontario.
Adults: 17-30 y/o, 36F, 17M, avg:20.54 yrs, SD: 3.34. From Introductory Psych. from an Eastern Ontario university.

PROCEDURE

CREATING THE VIDEO CLIPS & PHOTO-ARRAY LINE-UPS
Created 4 video clips of Dora & Diego, a 22-year-old Caucasian man & woman. The clips were in colour, with no sound, 6 seconds long, & had a two-to-three-second close-up of the person's face. Each video had a photo-array line-up of 4 tightly cropped, black-&-white headshots. The target was dressed differently from the video clip, & the other three photographs were foils. The TA condition swapped the target for another foil in the same position. Human foils were selected

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from a set of 90 M & 90 F faces, while cartoon foils were selected as they were similar to the target.

BEFORE THE TESTING PHASE
Dora & Diego were used to assess children's memory. Parents completed informed consent forms & an eight-item questionnaire, estimating their child's weekly cartoon-watching time. 4F researchers from a university were the experimenters, involving craft activities & adult Ps. Aimed to underst& children's memory & how cartoons impact their learning experiences.

WATCHING THE VIDEOS
Child Ps were shown videos & asked questions to remember the cartoon character/person. After each clip, they were asked if they remembered anything else. The researcher recorded their answers, which were not analyzed. The procedure was identical for adults, but they recorded their own answers. The children's responses were recorded for two minutes.

THE PHOTO-ARRAY LINEUPS
The video was st&ardized & Ps were instructed to look at photos to identify the person/cartoon. Line-ups were displayed using presentation software on a laptop. Adults recorded their answers on a sheet, following the same procedure as children.

AFTER TESTING WAS COMPLETE
The child Ps were thanked & given gifts of crayons & a colouring book. The adult Ps completed the Demographic & Cartoon Watching Form after the testing phase & finally were debriefed & thanked.

RESULTS
TP LINEUPS
Children were better at identifying cartoons in TP [0.99] than human faces [0.23], adults also better at identifying cartoons [0.95] than human faces, & they were more successful generally than children [0.66], but no large difference in identifying cartoons.

TARGET ABSENT LINE-UPS
Children had a higher success rate with TALUs including cartoon characters [0.74], compared to faces [0.45]. Adults performed better with cartoon characters [0.94], compared to humans [0.70]. Children had a higher rate of FPs. Although children had a higher rate of FNs, the difference was smaller than for FPs.

Children often make FPs due to social factors, with a lower rate of correct responses in TALUs [0.74]. These FPs are likely driven by social situations, rather than cognitive factors, as children may perceive a need to pick someone out despite being informed otherwise.

		Children	Adults
Cartoon Characters	**TP**	Dora: 1.0	Dora: 1.0
		Diego: 0.97 FNs: 0.03	Diego: 0.89 FNs: 0.11
	TA	Dora: 0.80 FPs: 0.20	Dora: 0.96 FPs: 0.04
		Diego: 0.67 FPs: 0.33	Diego: 0.92 FPs: 0.08
		F: 0.24	F: 0.46

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Human faces	TP	FPs: 0.38 FNs: 0.38	FNs: 0.54
		M: 0.21 FPs: 0.45 FNs: 0.34	M: 0.85 FPs: 0.15
	TA	F: 0.47 FPs: 0.53	F: 0.72 FPs: 0.28
		M: 0.43 FPs: 0.57	M 0.67 FPs: 0.33

CONCLUSIONS

Cartoon characters were identified with almost 100 per cent accuracy in TP lineups, despite cognitive factors like faulty memory. Children were less accurate than adults when faced with unfamiliar human actors & were more prone to giving FP responses. Social factors, such as incorrectly believing the researcher would prefer a positive identification, were also identified as contributing factors.

ETHICAL ISSUES

Pozzulo's study on false memory, using photo-array line-ups, demonstrates that Ps were not deceived, avoiding manipulation of recall. This is crucial in studies of false memory, as it prevents psychological harm & fully informed consent.

METHODOLOGICAL ISSUES
RELIABILITY

The study replicated TALUs by instructing Ps to watch carefully, answer open questions, & complete a two-minute task. Ps were instructed to identify the target, ensuring reliability in identifying individuals in line-ups with high FP responses.

Researchers' line-up tasks had a weakness in reliability due to the variation in question types, potentially altering Ps' responses based on their previous responses, as Ps may have different confidence levels based on previous responses.

VALIDITY

Repeated measures to improve internal validity. Ps participated in both human & cartoon line-ups, providing a baseline for comparison in the TA condition. This allowed for the comparison of PVs, to check if poorer performance was due to social factors.

Researchers manipulate familiarity by using two-dimensional animation & unknown human actors. This makes it difficult to interpret findings, as we may remember two-dimensional characters better due to their decreased complexity.

High control [all coloured vids, soundless, target's close-up, same length]. Allowed for accurate evaluation of the target & line-up, preventing any unintentional influence of confounding variables.

OBJECTIVITY & SUBJECTIVITY

Minimized subjectivity in choosing potential foils for photo-arrays by having three raters rate ten different cartoons for each target. They rated the photographs for similarity to the target, & the top four were chosen. Prevented confounding variables.

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GENERALISATIONS & ECOLOGICAL VALIDITY

Generalising beyond the sample

Factors such as social background, socioeconomic status, & private schools may impact the experiences of Ps. Children from wealthy families were likely to attend private schools, while adults were mostly students & under 30 years old. These factors made them vulnerable to social factors & more likely to witness crime. Therefore, researchers in forensic psychology must diversify their samples to improve justice experiences for all, regardless of their social background.

Generalising to everyday life

The laboratory experiment's artificial nature, combined with short video clips, may not accurately represent real-life situations. The witness's exposure to other sensory cues, such as sound & smell, may have contributed to errors. The short time between encoding & retrieval & the combination of cartoon characters & human faces may reduce ecological validity, potentially resulting in less pronounced differences in errors between adults & children under realistic circumstances.

ISSUES & DEBATES

THE USE OF CHILDREN IN PSYCHOLOGICAL RESEARCH

Social pressure can be particularly harmful to children, especially those aged four to seven. Researchers, aware of this, encouraged children to change their minds & feel comfortable. This approach helps children feel motivated & comfortable in challenging situations.

APPLICATIONS TO EVERYDAY LIFE

Police work & criminal justice

Countless miscarriages of justice arise from jurors' tendency to rely on questionable eyewitness testimony, underlining the importance of evidence-based practice. This can help police develop guidelines for interviewing child witnesses, reducing their tendency to make incorrect identification instead of rejecting a TALU.

Strengths	Weaknesses
The standardised procedure of the instructions & line-ups means the study can be easily replicated	lack of consistency in the number of questions asked to Ps during the filler task reduced reliability.
Quantitative data was collected in the form of correct or incorrect responses, reducing subjectivity in data analysis.	2D cartoons were compared to 3D human faces, reducing the validity of the comparison.
Similarities	**Difference**
Both Pozzulo & andrade collected quantitative data	Pozzulo used a visual memory test, while andrade used an auditory memory test.
Both Pozzulo & Baron-Cohen used foils in their studies.	Pozzulo used two groups of Ps, while Baron-Cohen used four.

LINKS TO ASSUMPTIONS

Cartoon characters are identified with almost 100 per cent accuracy in children & adults, demonstrating the same processing route in all humans.