



# How the Use of Simulations Effects the Understandability, Memory for, and Persuasiveness of Expert Testimony

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## Introduction

### Why have experts in court?

To explain evidence that can't be understood by most people without assistance.

### What do experts do in court?

Experts testify about both facts and opinions.

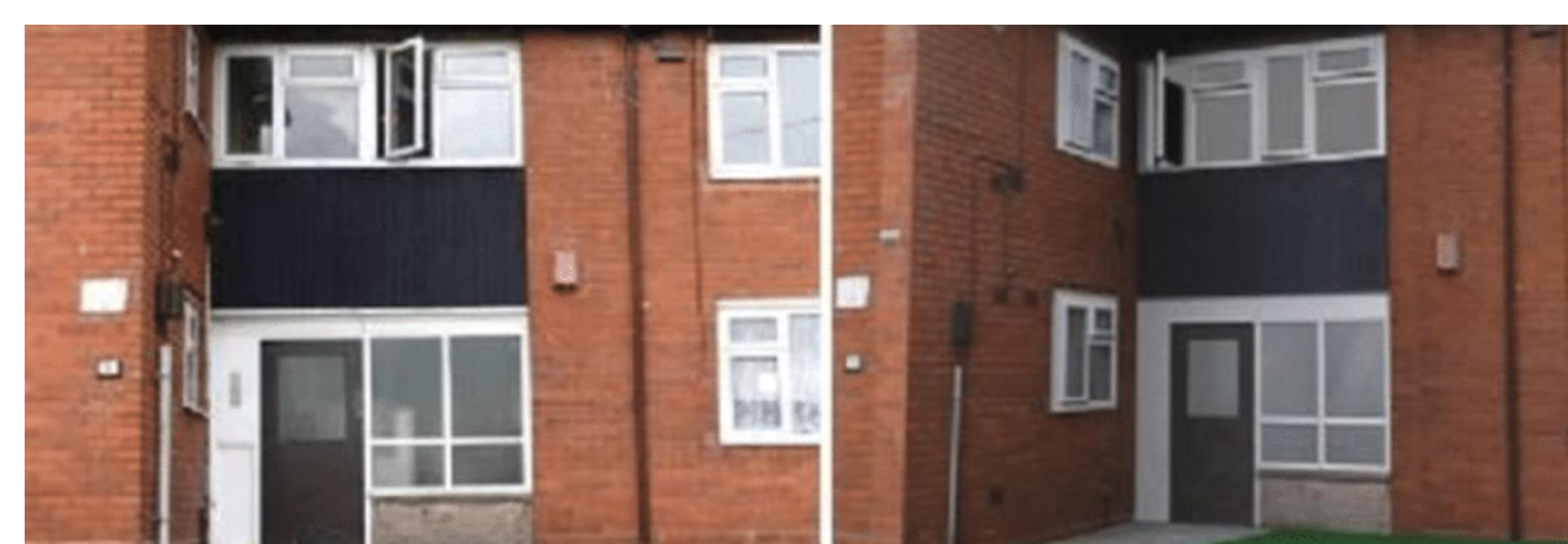
Normal (lay) witness can only testify to facts about which they have direct knowledge.

### How do experts communicate their testimony?

- Talking
- Using diagrams
- Now, using simulations

### What are the problems?

“Too” persuasive – in jurors’ memories fact and simulation may be confused.



One of these buildings is simulated. Can you tell which one it is?

## Airplane Crash Simulation



Still image of the simulation used in the video presentation for conditions 2 & 3.

## Research Objective & Hypotheses

To determine the effect that simulations have on perceptions of expert testimony.

- **Hypothesis 1:** Conditions that used a simulation will be more persuasive than those that didn't.
- **Hypothesis 2:** Participants will show better understanding and memory for the simulations.
- **Hypothesis 3:** Participants will be more likely to decide in favor of a party to a case when the expert testifies using a simulation.

## Methodology

### Participants

- University of Oregon Psychology Department human subjects pool.

### Design

- Participants randomly assigned to one of three conditions based on use of a simulation and use of cross-examination.

	SIMULATION		CROSS-EXAMINATION	
	WITH	WITHOUT	WITH	WITHOUT
1: No Simulation, No Cross		✓		✓
2: Simulation with Cross	✓		✓	
3: Simulation, No Cross	✓			✓

### Dependent Measures

- Verdict.
- Evaluation of importance, reliability, and persuasiveness of testimony
- Memory for:
  - Events in evidence but not in the simulation.
  - Events in the simulation and in the evidence.

## Results

- Still a work in progress.
- Currently in the data collection phase.
- Data analysis coming soon.

## Limitations & Future Consideration

### Limitations

- Generalizability.
- Sample size & profile.

### Understanding

- Can increased use of simulations improve judges’ and jurors’ understanding of scientific and other specialized evidence?

### Bias

- Can simulations bias judges’ and jurors’ memories of the facts?
- Can possible biases be countered through judge’s instructions?

### Fairness

- If only one side in a case has the resources to produce a vivid realistic simulation, does it make the trial unfair?
- Should defendants in criminal trials have a right to have simulations provided for them if they can't afford one?

## References

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