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Pedestrian behavior laboratory



CHILD PEDESTRIANS' PERCEIVED RISK OF THE CROSSING PLACE

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How do road-side factors influence the way children perceive the safety of a crossing location?

Perception of the crossing location

Awareness towards potential hazards

Readiness to cross



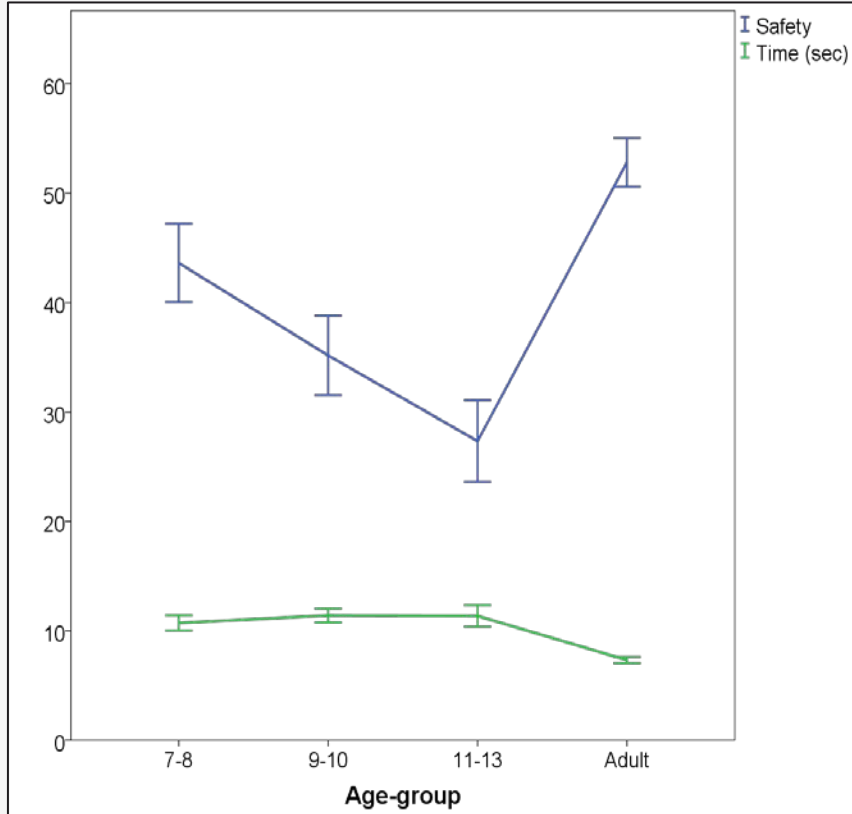
Experimental method



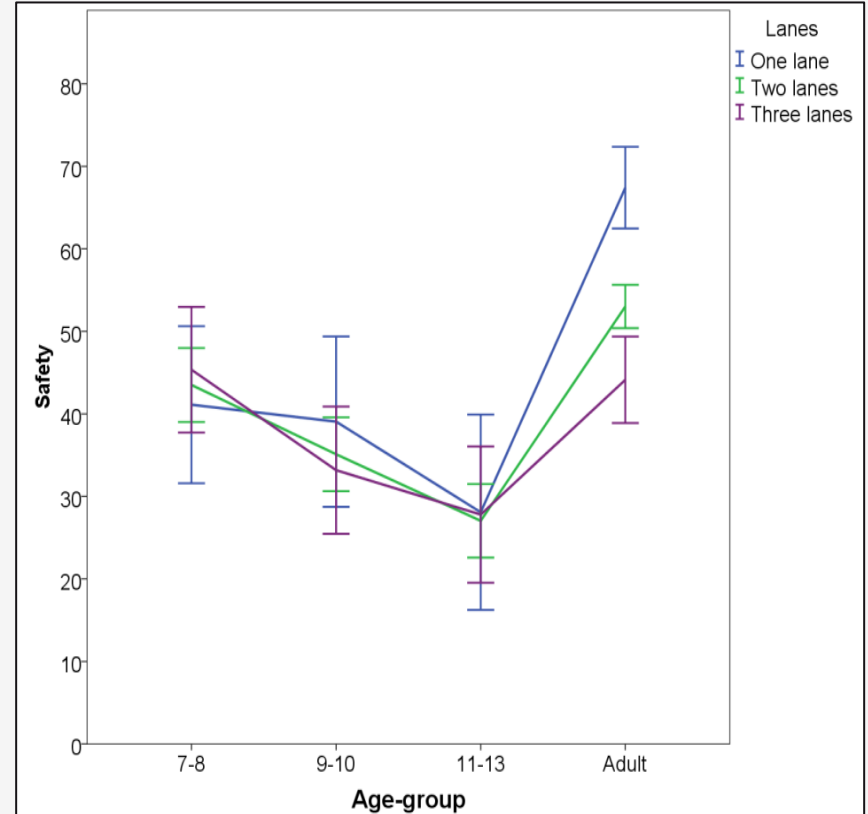
- 24 elementary school **Children** (ages 7-8, 9-10, 11-13); 12 **Adults**
- Each viewed 41 panoramic stills of real-world road-side environments from a pedestrian's POV.
- Rate each scene on a scale of (0-100) for safety.



Overall Safety rating & time to decision by Age

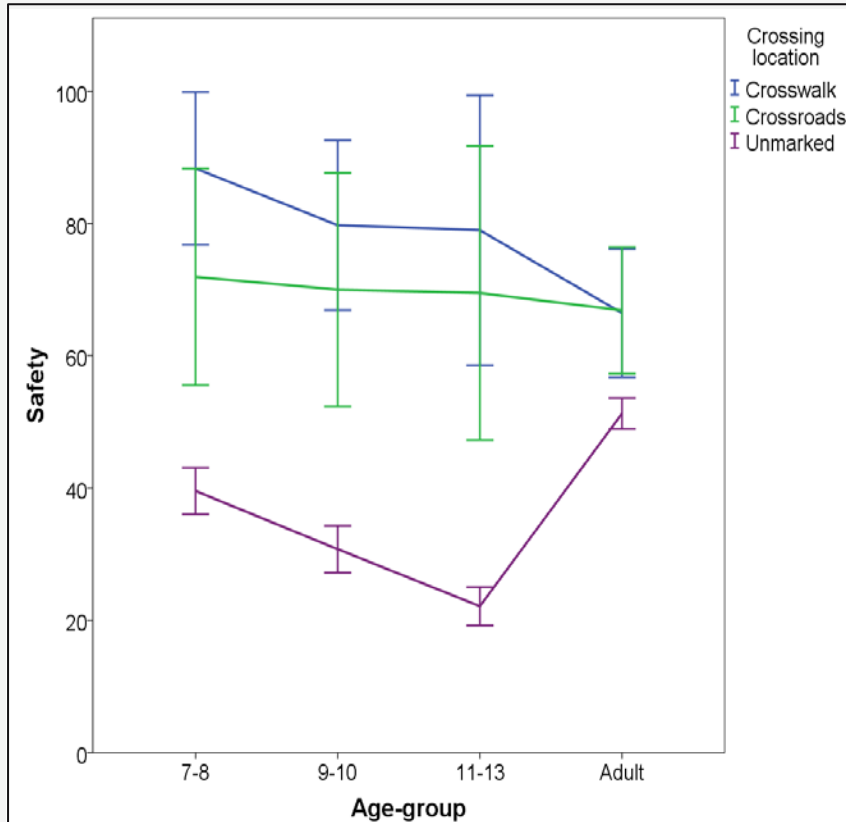


Number of lanes Safety rating by Age



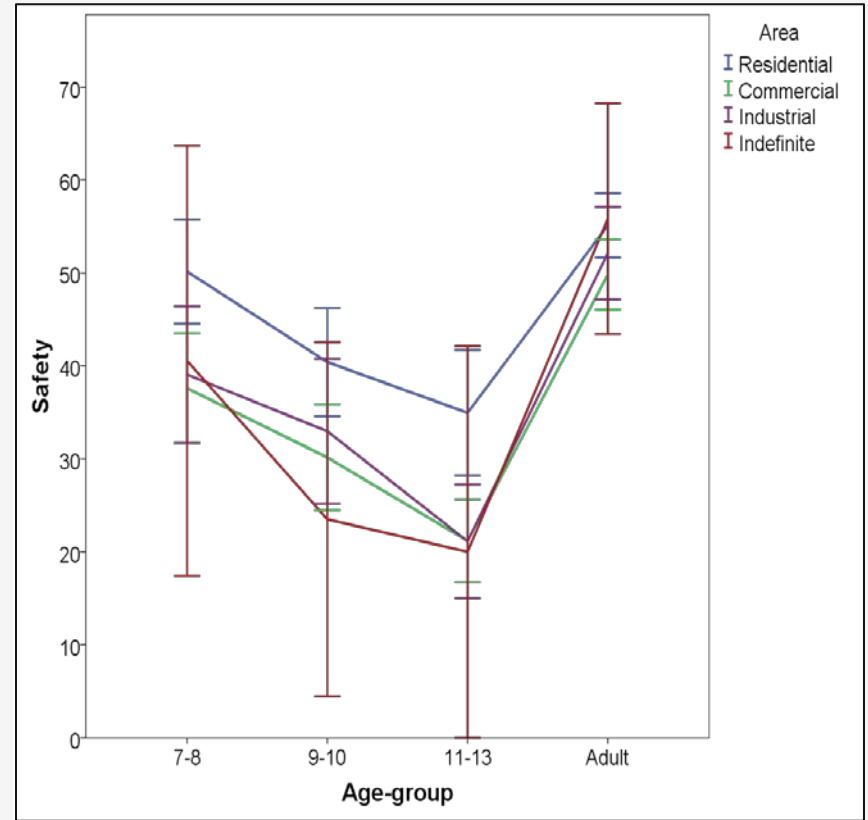
The place of crossing

Safety ratings by age



Urban area category

Safety ratings by age



Most important Take home points



Different age groups perceive crossing locations differently

- Children tend to evaluate the safety of the place based on lower reasoning, like dedicated crossing locations.
- Perceptions change with age- Older children demonstrate more cautious behavior.





- Compare Perception of the crossing location with actual crossing decisions.
- Can children be taught to take “high-order” factors into account when evaluating a crossing location.

Research needs

Perception of the crossing location

Awareness toward potential hazards

Readiness & Projection



From knowledge to Practice



Enhancing children's abilities to cross the road safely.

- Knowledge of failure to pay attention to critical factors in the environment should be addressed when training young children.
- Better understanding of the decision process and its difficulties can lead to more focused training programs.

Infrastructure design

- Looking and examining the environments through the eyes of special groups (e.g. children) can dictate new design guidelines for specific areas (narrower roads or more dedicated places to cross the roads on busy paths from home to school and back).





Child Pedestrians' perceived risk of the crossing place

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