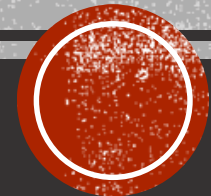


Where the Sidewalk Ends: Pedestrian Access for Persons with Albinism

Kimberly Avila, M.A., COMS

Ph.D Candidate



This Session...

- Will explore pedestrian access issues for people with albinism
- Will require audience participation
- Will evaluate our experiences as pedestrians and compare them to what research has documented





Reality

Research

Compare
and
contrast



Please Note:

- There are no right and wrong answers!
- Your perspective is valuable
- All research has limitations



Promoting Driver Yielding

- Drivers are more likely to yield to me if I am carrying a white cane?
 - Yes, they always will
 - Sometimes
 - Never



The Research...

- Findings from:
 - Bourquin, E., Wall Emerson, R., & Sauerburger, D. (2011). Conditions that influence drivers' yielding behavior for uncontrolled intersections. *Journal of Visual Impairment & Blindness*, 105, 760-769.



Driver Yielding

- What do you think is the most effective method to get drivers to yield to pedestrians?
- A: Yielding signs
- B: Public awareness campaigns
- C: Law enforcement warnings/citations to non-yielders
- D: Carrying a white cane/being a person with a disability
- E: Flashing lights
- F: Waiving at drivers



Meta Analysis Research

- A meta analysis
 - looks at several research studies
 - Takes findings from each
 - Computes effect sizes
 - Compares effect sizes

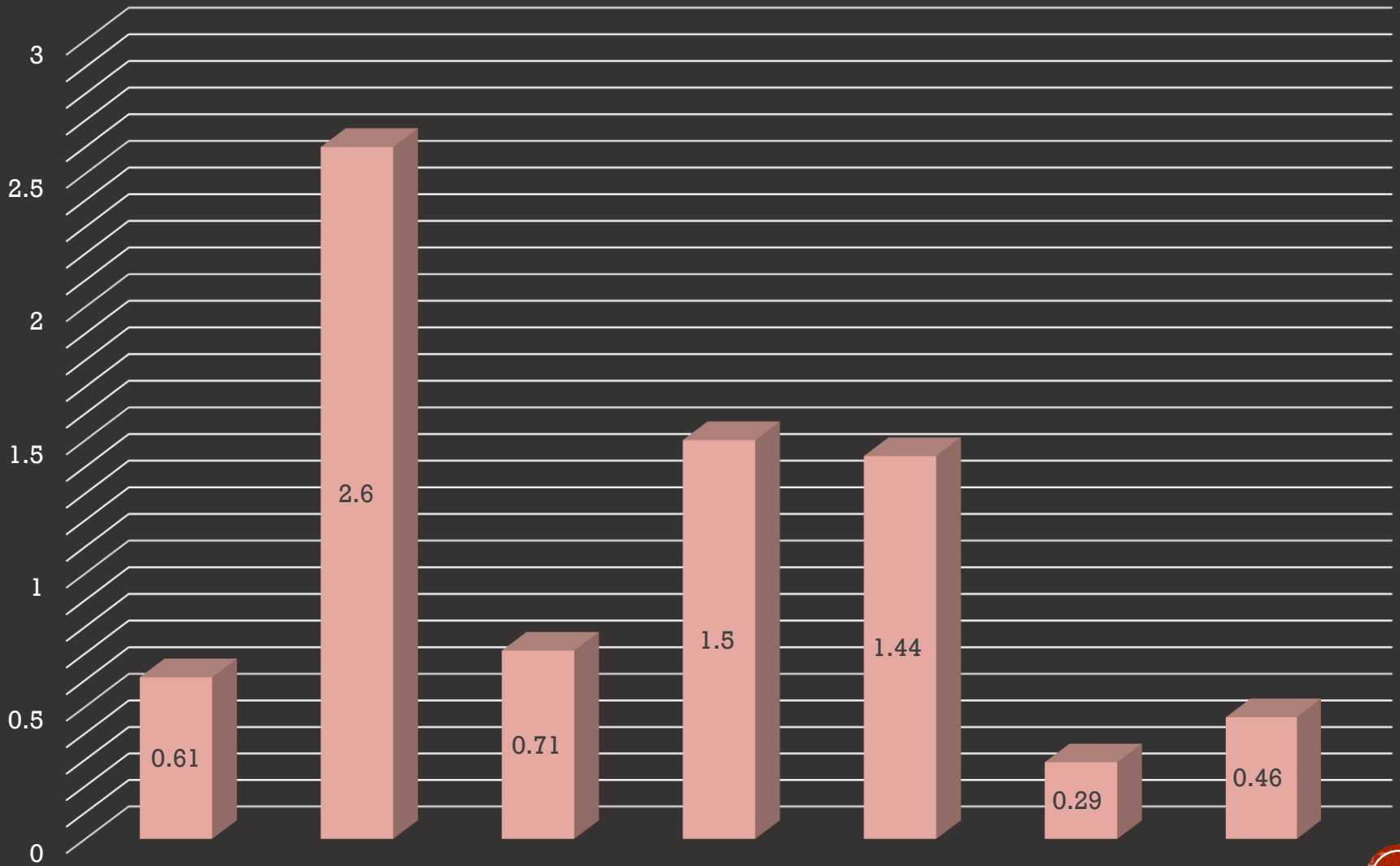


Meta Analysis was Conducted on the Following Articles

Author(s)	Date	Journal
Bourquin, Wall Emerson & Sauerburger	2011	Journal of Visual Impairment and Blindness
Boyce & Geller	2000	Environmental Behavior
Crowley-Koch, Van Houten & Lim	2011	Journal of Applied Behavior Analysis
Fisher & Garay-Vega	2012	Accident Analysis and Prevention
Geruschat & Hassan	2005	Journal of Visual Impairment and Blindness
Hakkert, Gitelman & Ben-Shabat	2002	Transportation Research
Harrell	1992	Environmental Psychology
Harrell	1994	Journal of Social Psychology
Van Houten & Malenfant	2004	Journal of Applied Behavior Analysis
Van Houten, Malenfant & Roldie	1985	Journal of Applied Behavior Analysis



Intervention Effect Sizes for Yielding



The Research Says...

- Van Houten & Malenfant (2004)
- Intervention to promote driver yielding to pedestrians was extremely successful



Audience Participation

- On a scale of 1-5, rate how important each of these are for your safety as a pedestrian:
 - 1: not important at all
 - 5: Vital to my safety



- Pedestrian cross signals at light controlled intersections

- 1: Not important at all to have these signals at street light intersections
- 5: Vital to my safety



- Access to audible/accessible pedestrian signals (audio signal alerting you when to cross the street)
 - 1: Not important at all
 - 5: Vital to my safety



Sidewalks

- Access to sidewalks everywhere you travel
 - 1: Not important at all
 - 5: Vital to my safety



Crosswalks

- Marked crosswalks at intersections and key places where pedestrians cross streets
 - 1: Not important at all
 - 5: Vital to my safety



Blocking the Box

- Crosswalks are free from cars blocking them at intersections:
 - 1: Not important at all
 - 5: Vital to my safety



Curb Cut Alignment

- Curb cut aligns with crosswalk
 - 1: Not important at all
 - 5: Vital to my safety



Signs

- Signs that indicate a blind pedestrian is in the area
 - 1: Not important at all
 - 5: Vital to my safety



Drivers

- Drivers that yield to pedestrians in accordance with the law,
 - Such as when turning right or left, at stop signs
 - 1: Not important at all
 - 5: Vital to my safety



White Cane Law

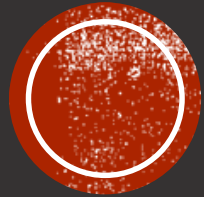
- All 50 of the United States and DC have laws regarding white cane laws:
- <http://acb.org/whitecane>
- Laws vary by states



Other

- What other safety features are important to you as a pedestrian?





The Experiences of Pedestrians with Visual Impairments in a Major Metropolitan Region

Research Summary



- Qualitative Study
 - Interviews with participants
 - Environment observations
 - Participant journaling
 - Review of records
- Setting: Metropolitan region on East Coast

Study Overview



Overview

- Nine participants
 - Albinism, low vision and blindness represented
- Study duration
 - Fall 2012-Spring 2014



Participants

- All participants are independent adults with blindness/low vision
- Two-thirds of the participants had been previously struck by drivers who did not yield to them
 - No white cane charges or pedestrian law violations were filed against the drivers
- All participants remarked they encounter near misses with drivers on a regular, sometimes, daily basis



Travel Scenarios

- Environments ranged from urban to semi-urban to suburban
- The researcher traveled routes around these environments and encountered serious safety issues on every route.
 - Traversed routes with and without a white cane
- Photos and video data gathered
- Follow-up interviews with some participants



Brief Summary of Findings

- Intrinsic, support and external factors
- Intrinsic: resilient, desire for independence, self-reliance, creative, problem solvers and willing to travel for long periods of time through various conditions to promote independence
- Instruction and support: Varied perspectives and experiences with O&M and parents influence on pedestrian skills



Brief Summary of Findings

- External:
 - Design of roadways, sidewalks, crosswalks, signals and driver behavior
 - Maintenance, precipitation removal
 - Other safety elements; perceptions of sighted population, presumption of inability and fault, perceptions/experiences with law enforcement



Your Perspective

- What would you like to see in future research for pedestrian safety that affects people with albinism?

