VR AV-Pedestrian Interaction

Factor Relationships Survey 1

We are conducting research on the relative importance of different factors in influencing pedestrian decisions when interacting with vehicles whilst crossing the road.  
Please indicate the extent to which you agree or disagree with each of the 4 questions below.

“I WOULD RATHER” instead of “WOULD YOU RATHER”

**2.** In this VR world, would you feel more comfortable crossing the road if there was a zebra crossing, or if there was no zebra crossing as in this scenario, or does it not matter?

**1.** In this VR world, would you feel more comfortable crossing the road if the vehicle was travelling further towards the parked black car, or further towards the parked blue car, or does it not matter?

**3.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle travel further towards the black parked car, than add in a zebra crossing? Give your answer according to the scale you see before you.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Strongly Believe 1 | Believe 1 | Moderately Believe 1 | Slightly Believe 1 | Both would be equally comfortable | Slightly Believe 2 | Moderately Believe 2 | Believe 2 | Strongly Believe 2 |

**4.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather add a pair of stop signs by the crossing area, than increase the ambient light level? Give your answer according to the scale you see before you.

**5.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather increase the ambient light level, than remove the one parked blue car that was blocking your vision of the moving vehicle? Give your answer according to the scale you see before you.

**6.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather add a pair of stop signs by the crossing zone, than remove the one parked blue car that was blocking your vision of the moving vehicle? Give your answer according to the scale you see before you.

VR AV-Pedestrian Interaction

Factor Relationships Survey 2

We are conducting research on the relative importance of different factors in influencing pedestrian decisions when interacting with vehicles whilst crossing the road.

Please indicate the extent to which you agree or disagree with each of the 4 questions below.

**6.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather remove the 3 parked cars that were blocking your vision of the moving vehicle, than make the vehicle’s driving behaviour less aggressive? Give your answer according to the scale you see before you.

“I WOULD RATHER” instead of “WOULD YOU RATHER”

**3.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather remove the 3 parked cars that were blocking your vision of the moving vehicle, than reduce the vehicle’s speed? Give your answer according to the scale you see before you.

**2.** In this VR world, would you feel more comfortable crossing the road if the vehicle was painted a lighter or darker colour, or does it not matter?

**1.** In this VR world, would you feel more comfortable crossing the road if the vehicle made louder engine and braking sounds, or softer engine and braking sounds, or does it not matter?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Strongly Disagree | Disagree | Moderately Disagree | Slightly Disagree | Neither Agree nor Disagree | Slightly Agree | Moderately Agree | Agree | Strongly Agree |

**4.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle a lighter colour, than reduce the vehicle’s deceleration? Give your answer according to the scale you see before you.

**5.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather reduce the vehicle’s speed, than make the vehicle’s driving behaviour less aggressive? Give your answer according to the scale you see before you.

**7.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle travel further towards the black parked car, than make the vehicle smaller? Give your answer according to the scale you see before you.

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VR AV-Pedestrian Interaction

Factor Relationships Survey 3

We are conducting research on the relative importance of different factors in influencing pedestrian decisions when interacting with vehicles whilst crossing the road.

“I WOULD RATHER” instead of “WOULD YOU RATHER”  
Please indicate the extent to which you agree or disagree with each of the 4 questions below.

**3.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather have the vehicle make louder engine and braking sounds, than make the vehicle a lighter colour? Give your answer according to the scale you see before you.

**4.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather add in a zebra crossing than have the vehicle make louder engine and braking sounds? Give your answer according to the scale you see before you.

**5.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather reduce the vehicle’s deceleration, than add a pair of stop signs by the crossing area? Give your answer according to the scale you see before you.

**6.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle stop further away from the crossing zone, than add in a zebra crossing? Give your answer according to the scale you see before you.

**2.** In this VR world, would you feel more comfortable crossing the road if the vehicle was smaller or larger, or does it not matter?

**1.** In this VR world, would you feel more comfortable crossing the road if the vehicle’s rate of deceleration was slower or faster, or does it not matter?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Strongly Disagree | Disagree | Moderately Disagree | Slightly Disagree | Neither Agree nor Disagree | Slightly Agree | Moderately Agree | Agree | Strongly Agree |

VR AV-Pedestrian Interaction

Factor Relationships Survey 4

We are conducting research on the relative importance of different factors in influencing pedestrian decisions when interacting with vehicles whilst crossing the road.

“I WOULD RATHER” instead of “WOULD YOU RATHER”  
Please indicate the extent to which you agree or disagree with each of the 4 questions below.

**4.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather add in a zebra crossing, than make the vehicle a lighter colour? Give your answer according to the scale you see before you.

**5.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle a lighter colour, than make the vehicle smaller? Give your answer according to the scale you see before you.

**6.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather reduce the vehicle’s speed, than make the vehicle stop further away from the crossing zone? Give your answer according to the scale you see before you.

**2.** In this VR world, would you feel more comfortable crossing the road if it was brighter or darker, or does it not matter?

**1.** In this VR world, would you feel more comfortable crossing the road if there were signs by the road or were not stop signs by the road, or does it not matter?

**3.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather have the vehicle stop further away from the crossing zone, than make the vehicle travel further towards the black parked car? Give your answer according to the scale you see before you.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Strongly Disagree | Disagree | Moderately Disagree | Slightly Disagree | Neither Agree nor Disagree | Slightly Agree | Moderately Agree | Agree | Strongly Agree |

VR AV-Pedestrian Interaction

Factor Relationships Survey 5

We are conducting research on the relative importance of different factors in influencing pedestrian decisions when interacting with vehicles whilst crossing the road.

“I WOULD RATHER” instead of “WOULD YOU RATHER”  
Please indicate the extent to which you agree or disagree with each of the 4 questions below.

**1.** In this VR world, would you feel more comfortable crossing the road if there were parked cars blocking your vision of the moving vehicle, or if those parked cars were not there, or does it not matter?

**2.** In this VR world, would you feel more comfortable crossing the road if the vehicle’s speed was higher or lower, or does it not matter?

**6.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather increase the ambient light level, than decrease the vehicle’s speed? Give your answer according to the scale you see before you.

**5.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle smaller, than increase the ambient light level? Give your answer according to the scale you see before you.

**4.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle smaller, than add a pair of stop signs by the crossing zone? Give your answer according to the scale you see before you.

**3.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather reduce the vehicle’s rate of deceleration, than make the vehicle smaller? Give your answer according to the scale you see before you.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Strongly Disagree | Disagree | Moderately Disagree | Slightly Disagree | Neither Agree nor Disagree | Slightly Agree | Moderately Agree | Agree | Strongly Agree |

**7.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather add in a pair of stop signs by the zebra crossing, than make the car stop further from the zebra crossing? Give your answer according to the scale you see before you.

VR AV-Pedestrian Interaction

Factor Relationships Survey 6

We are conducting research on the relative importance of different factors in influencing pedestrian decisions when interacting with vehicles whilst crossing the road.

“I WOULD RATHER” instead of “WOULD YOU RATHER”  
Please indicate the extent to which you agree or disagree with each of the 4 questions below.

**3.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle drive less aggressively, than make the vehicle stop before the zebra crossing? Give your answer according to the scale you see before you.

**4.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle travel further towards the black parked car, than make the vehicle’s engine and braking sounds louder? Give your answer according to the scale you see before you.

**5.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle's engine and braking sounds louder, than reduce the vehicle’s rate of deceleration? Give your answer according to the scale you see before you.

**6.** Imagine you could change one thing in this scene to make it more comfortable for you to cross: I would rather make the vehicle drive less aggressively, than make the vehicle drive further towards the black parked car? Give your answer according to the scale you see before you.

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**2.** In this VR world, would you feel more comfortable crossing the road if the vehicle stopped closer to the crossing zone, or further away from the crossing zone, or does it not matter?

**1.** In this VR world, would you feel more comfortable crossing the road if the vehicle was driving aggressively or defensively, or does it not matter?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Strongly Disagree | Disagree | Moderately Disagree | Slightly Disagree | Neither Agree nor Disagree | Slightly Agree | Moderately Agree | Agree | Strongly Agree |