

How can visual communication help cyclists and drivers understand each other's point of view, in order to enhance road safety?



The need

When cyclists and drivers share the road, the experience can result in conflict that affects the lives of all involved. Cyclists are particularly vulnerable, being at higher risk of death or injury.

Recent research shows aggressive behaviours towards cyclists are linked to negative, dehumanising attitudes. To enhance safety, attitudes of all road users (including cyclists) need to improve.

This research project investigated how to develop better understanding between all road users, through engaging, personalised visual communication. The project output included a practical response designed to address this need, in the form of an interactive story prototype.

The design response: an interactive story

Following focus group research, an interactive story was selected as a way to connect all road users. The concept is based on the idea of going on a journey, being part of a family, and seeing things through others' eyes.

Non-cyclists experience the journey as a cyclist, and vice versa. Their decisions along the way affect their path through the story, leading to different experiences and consequences (rather than right/wrong choices).

The concept was prototyped using an online platform (Typeform) and personalised based on road user role/s. To test individualised versus group personalisation, a second version was built and personalised with user information such as name and location.



Interactive story screenshots

Conclusions

Interactive stories have potential to change attitudes if personalised around the perspectives of groups like cyclists or drivers. Many people reported they had learned about issues facing other road users, or said the story had reinforced their awareness of road safety issues, rules and behaviours.

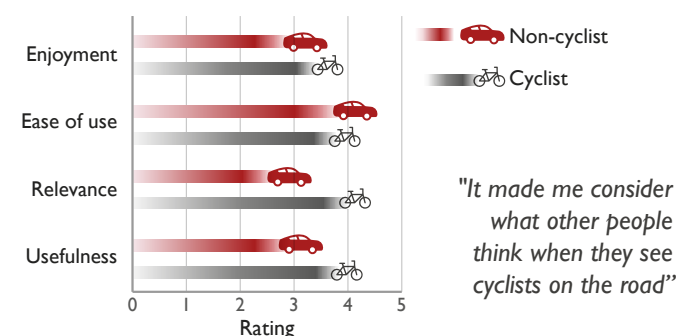
There was unanimous support for education that improves understanding of cyclists and vulnerable road users to be part of driver training. The need to train cyclists as well as drivers also emerged as an area for further research.

Summary of research findings

- Attitudes are shaped by media coverage, education, peer pressure, personal experience, road infrastructure, culture and social norms
- Using multiple modes of travel increases positive attitudes, so building empathy between road users could decrease conflict
- Role-based labelling such as "driver" or "cyclist" may limit communication effectiveness and reinforce stereotypes
- Relating road users to their human context (part of a family rather than part of a car/bicycle) could help connect and humanise them
- Personalising communication for groups may make it more relevant, while personalisation for individuals could make it more engaging
- Communicating road-sharing experiences through interactive stories has potential to build empathy and create attitude change.

Feedback about the prototype story

User ratings of the prototype



"It reinforced my awareness of how cars and bikes are able to interact safely"

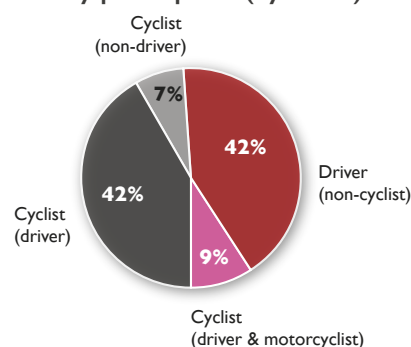
"It did make me go check the laws"

"It made me think about road conditions that cyclists need to deal with that may not be obvious for a driver"

"I was not aware of dooring"

100% of respondents said education about cyclists and vulnerable road users should be part of driver licensing

Survey participants (by role/s)



27% of respondents indicated their perception of other road users had changed in some way after using the story



To try the story, scan the QR code on a smartphone, or go to <http://bit.ly/roadperspectives>