The 'ripple effect' of driving behaviour

blogs.lse.ac.uk/psychologylse/2016/01/25/the-ripple-effect-of-driving-behaviour/

25/01/2016

The Department of Social Psychology has completed a research project for the tyre company Goodyear, working through LSE Enterprise. Dr Chris Tennant discusses what the study revealed about the psychology of 'ordinary, everyday' drivers, and how they can get involved in antagonistic interactions with other drivers, (combative driving) and co-operative interactions with other drivers, (considerate driving).

Introduction

When negotiating road space with others, drivers frequently apply the logic of reciprocity. Since many interactions are fleeting the reciprocity is often indirect: in a survey of nearly 9000 people 87% agreed that when one driver had helped them, they might be more likely to help another later on their journey. Whilst less frequent, the converse can also be true: when one driver impedes you, you are more likely to be less helpful to, or possibly even to impede, another 55% of our respondents were prepared to admit this too could be true of them. Our own behaviour can create a ripple effect of similar behaviour by other drivers. As a result, the very behaviours which we find provocative in others are the same behaviours we sometimes engage in as a consequence.

Scripts

We use the psychological concept of scripts to characterise the different ways in which people engage with the task of driving. At a simple level a script might be the sequence of driver behaviours required to negotiate a roundabout. At a more general level, a script might encompass the overall orientation a driver brings to a journey, such as aggressive and urgent, or laid back and calm, an orientation that organises many of their interactions with others on that journey. Scripts are normative guides to our own behaviour and expectations of the ways that others will behave, so that when another driver fails to follow scripted behaviour we experience this as if it were a breach of a moral code, and can become angry as a result.

Research Methods

We used a combination of focus group interviews and survey data to research how drivers experience their interactions with other drivers. Members of the public were recruited to use helmet-mounted cameras to film their own driving. The films were then used to conduct structured interviews with them, and to stimulate discussion within the subsequent focus groups. We also embedded film clips in the survey to encourage realistic responses to specific driving situations rather than more general responses to abstract statements about being on the road. We recruited and interviewed nine drivers, and held five focus group discussions in the UK and Italy, with 41 participants in total. We surveyed 8,971 respondents across 15 countries.

Combative and considerate driving

The focus group and driver interview provided detailed descriptions of many typical interactions on the road which will be very familiar to most drivers. What is clear from this data is that all drivers can interact both negatively and positively with their fellow road users. While other research rightly draws attention to the challenge of identifying specific 'problem drivers who are prone to dangerous behaviour, our research demonstrates the need to recognise also how different contexts can make anyone drive more dangerously – even if they would normally not be considered to be problem drivers. Setting aside factors such as weather conditions or fatigue, an essential part of

1/3

the context that can lead us to drive dangerously is the interactions we have with other road users as a journey unfolds. Drivers respond to others in these interactions. Our survey data suggest that the different scripts people follow in their interactions with other road users can be grouped according to whether they are 'combative' or 'considerate'. An important element of combative driving is a possibly excessive sensitivity to contextual factors, leading to a readiness to be provoked by others' perceived failings.

Use of these combative and considerate scripts was measured by scales developed from our survey. Most drivers are considerate most of the time. However, for some people the use of combative scripts is cued by the context more readily than for others. The usefulness of these scales is demonstrated by their capacity to predict how people read the video scenes presented to them as part of the survey.

Unwritten rules

All jurisdictions provide detailed definitions of the right of way between interacting drivers, but in practice road users apply these flexibly to respond to varying circumstances and expect others to do the same. In the survey we asked: 'Do you think there are unwritten rules about how one should behave towards other drivers? By 'unwritten rules' we mean shared expectations of how one should behave, which are not included in formal written driving laws'. 88% of respondents said yes. Most agree that much of the content of these unwritten rules is 'etiquette', but they also encompass the flexible versions of the codified rules of the road that we apply all the time: e.g. in slow moving traffic, even though it is your right of way, you might well allow another driver to merge, and the other driver might well expect you to do so: afterwards, you would expect them to make a gesture of thanks. These 'unwritten rules' are another example of the scripts we follow as drivers.

Important sources of conflict on the road arise from misunderstandings when drivers follow different scripts (e.g., when they interpret the written rules differently), and when there are difficulties in communicating which scripts they are using.

Change the script, change the driving

These results suggest targeting interventions to encourage drivers to follow considerate scripts in situations where it might be easy to follow combative scripts and so begin a chain of antagonistic interactions with other drivers. We believe there is much scope for interventions that get drivers to see interactions on the road from multiple perspectives, for example by using video of simple interactions from the perspective of all participants. This would make the range of different possible scripts more evident to them. Combative driving goes hand in hand with a narrowing down of the driver's focus to their own perspective alone. Drivers who agree that we all have a part to play in keeping the traffic flowing safely often forget this when they are impeded, and focus instead on the personal insult they feel they have suffered. Multiple perspectives can remind drivers that their own combative driving imposes the same insults on others, and opens up awareness of more considerate scripts. Such methods could encourage the reduction of antagonism by meeting a combative script with a considerate script.

Conclusions

This research demonstrates the importance of trying to improve the quality of 'ordinary, everyday' interactions between drivers. Drivers themselves create the very environment they often find stressful and to which they can respond combatively: more considerate driving would generate more considerate driving. Just as combative driving can generate a chain of indirectly reciprocal provocations between drivers, considerate driving can create a ripple effect of safer journeys.

Research conducted by:

Dr Chris Tennant[1]   Dr Sally Stares[2]

Dr Susan Howard[1]

Matthew Hall[1]

Dr Bradley Franks[1]

Professor Martin Bauer[1]

1: London School of Economics, Department of Social Psychology.

2: City University, London, Department of Sociology