

Seeing Red on the Road: Can Car Color Impact Driver Behavior?

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It's a common belief that driving a red car leads to more speeding tickets and higher car insurance rates. However, research from a 2007 study by Monash University in Australia found that red cars are actually slightly less likely to be involved in accidents compared to other colors (black cars were actually most accident prone). The insurance industry also denies that car color comes into play when setting car insurance rates, though they do look at the vehicle make and model.

New research from an international team of psychological scientists puts the brakes on another common stereotype about red cars: they elicit more aggressive driving.

At least in Western culture, the color red has long been associated with emotions like anger and aggression. Since at least 1942, researchers have observed that red can lead to heightened physiological arousal and aggression whereas colors such as blue or green can have a calming effect.

In one example, a recent article in [Psychological Science](#) found that men with a preference for the color red had higher testosterone levels compared to men who preferred blue. In addition, men with a preference for red rated it as having higher levels of characteristics such as dominance and aggression than participants who favored blue.

And a field study led by Nicolas Guéguen of the University of Southern Brittany in France showed that drivers expressed more aggressive behavior towards red cars.

For the study, a male confederate driving on a fairly busy street stopped at a red light at an intersection. When the light turned green, he refused to move—successfully eliciting aggressive responses from many of the cars stuck behind him at the green light.

Two observers tracked how long it took before other drivers started to react, and how many honks or light flashes the experimental car received. The researchers ran the experiment using the same model car in five different colors: red, green, blue, black, and white.

After analyzing reactions from 422 drivers, Guéguen found that red cars elicited significantly more aggressive responses; people honked sooner and more often than with any of the other colors.

Given that the color red has been so commonly linked to aggression, dominance, and other strong behavioral responses, an international team of psychological scientists led by Amparo Díaz-Román and Alberto Megías of the University of Granada wanted to investigate whether red cars are perceived as riskier or more dangerous than other cars.

Díaz-Román and colleagues predicted that seeing red cars, relative to other colors, would elicit faster responses and higher perceptions of risk during dangerous driving scenarios.

For their study, 100 drivers were seated at a laptop and shown a series of videos of several road scenarios involving hazardous driving from cars of different colors: red, black, white, yellow, green, and gray.

Participants were instructed to press a mouse button as quickly as possible to indicate whether they thought the current road scenario was dangerous enough to warrant braking or not. They then assessed the level of risk they perceived in each scenario using a 7-point rating scale.

Díaz-Román and colleagues were surprised to find that red cars didn't seem to have any particular effect on participants' decision-making speed or sense of risk. In fact, people had the fastest response times in scenarios with dangerous drivers in black cars.

“Although car color affected participants' response times, contrary to expectations, red cars did not elicit faster responses or higher perceived levels of risk.”

Differences in the types of tasks used in the two experiments—horn-honking and light-flashing in the first compared to risk evaluation and braking speed in the second—could help explain why the two studies ended up suggesting divergent reactions to red-colored cars. More research is needed to determine whether the proposed “red effect” presents a real hazard for drivers.

References

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