Effects of emissions labels on consumer choice of lower-emission flights

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Introduction

Flying generates substantial greenhouse gas emissions, yet consumers often receive little information about the environmental impact of different flight options. Many flight-booking websites now display emissions labels that aim to help travellers make more sustainable choices. This study examined whether consumers understand the information labels provide, can use them to identify the least polluting options and are encouraged to choose lower-emission flights when they see them.

Data and methods

A nationally representative sample of 1,000 adults in Ireland took part in an online experiment. Participants used holiday-booking websites designed to resemble real holiday-booking platforms. They were randomly assigned to see one of four versions of the website: no emissions information, estimated emissions for each flight, emissions estimates alongside labels comparing flights on the same route

or a version that also highlighted the lowest-emission option. The appearance of the emissions labels matched those in the real market.

Participants chose flights, accommodation and activities for hypothetical holidays. The study's focus on environmental issues was concealed so that people would behave as naturally as possible. Participants then completed a second task in which they were asked to identify the lowest-emission flights. Finally, they answered questions about their understanding of the labels and their views on flying and climate change.

Results

The study also found that understanding of flight emissions labels was poor. Fewer than one in six participants correctly understood what the relative-emissions labels were comparing. Many also misunderstood how flight emissions are calculated.

In the flight choice task, when participants were specifically asked to prioritise environmental impact, emissions information helped them identify lower-emission flights. However, many participants were confused by the relative emissions labels, incorrectly believing that long-haul flights with low relative emissions (for that route) were more climate friendly than short-haul flights with high relative emission (for that route).

When participants were not explicitly instructed to choose lower-emitting flights, estimated emissions for flights did not affect people's choices. However, labels that compared flights with other options on the same route encouraged participants to choose lower-emission flights, although the effect was small. Among participants who saw either no emissions information or the absolute level of emissions, 22% chose the lowest-emission flight. This rose to 27% among those shown relative emissions labels.

Conclusions

Flight emissions labels can influence consumer choices, but the effects are small. Labels that make emissions information more noticeable do encourage some consumers to choose lower-emission flights, but many people do not understand how the labels work. Some labels may encourage people to believe that long-haul flights have less climate impact than, in fact, they do. The findings suggest that current flight emissions labels are unlikely to meaningfully reduce aviation emissions. Improving the design and clarity of labels may help consumers make better-informed choices, but additional measures will be needed to reduce emissions from air travel.