

## The effect of propaganda about climate change on people's desire to fly

Andrew GILBEY\*, Jose PEREZGONZALEZ and Kawtar TANI  
School of Aviation, Massey University, New Zealand

### Executive summary

#### Background

The theory of Psychological Reactance suggests that in response to regulations or impositions that impinge upon real or perceived freedoms and autonomy, people may find the restricted behaviour or product appeared more desirable. This reaction is especially common when individuals feel obliged to adopt a particular opinion or engage in a specific behaviour (Brehm & Brehm, 1981). Many sources suggest that aviation has a significant effect on global warming (e.g., Greenpeace). This pilot study explored whether, via the phenomenon of Psychological Reactance, people's desire for air travel increases following exposure to propaganda about climate change and global warming.

#### Method

Participants, 39 aviation students and 41 psychology students, completed a 13-item questionnaire designed to measure how much they personally want to travel by air. Approximately half of the aviation students and half of the psychology students (experimental condition,  $n = 39$ ) were exposed to two short videos about the effect of aviation on the environment and were also given a booklet from 'Friends of the Earth' that suggested they should try to avoid air travel whenever possible, following which, they completed the questionnaire. The remaining participants (control condition,  $n = 41$ ) only completed the questionnaire and were not exposed to any further information.

#### Results

Reliability analysis of the 13-item questionnaire revealed a Cronbach's alpha = .77. There was a highly significant main effect for the primary manipulation of propaganda,  $F(1, 79) = 9.82, p = .002$  (air travel was perceived to be more desirable by those in the experimental condition) and also for course,  $F(1, 79) = 20.88, p < .001$  (aviation students perceived air travel to be more desirable than did psychology students). There was no evidence of an interaction between sample and condition,  $F(1, 79) = .02, p = .900$ .

#### Conclusion

These findings suggest that psychological reactance may lead to an increased liking for air travel following exposure to green propaganda. These results may come as a surprise to those disseminating such information.

#### References

- Brehm, S. S., & Brehm, J. W. (1981). *Psychological Reactance: A Theory of Freedom and Control*. NY: Academic Press.
- Greenpeace (2010). *The problem with aviation*. Downloaded on 9<sup>th</sup> May, 2010, from <http://www.greenpeace.org.uk/climate/aviation>

---

\* Correspondence author: Dr. Andrew GILBEY, School of Aviation, Massey University, Turitea Campus, Private Bag 11222, Palmerston North 4442, New Zealand. <http://aviation.massey.ac.nz/>