# $\begin{array}{l} \textbf{SCIENTIFIC} \\ \textbf{AMERICAN}^{\text{\tiny TM}} \end{array}$

#### MIND

# The Surprising Problem of Too Much Talent

A new finding from sports could have implications in business and elsewhere

Roderick Swaab and colleagues suggests there is a limit to the benefit top talents bring to a team. Swaab and colleagues compared the amount of individual talent on teams with the teams' success, and they find striking examples of more talent hurting the team.

### The Too-Much-Talent Effect: Team Interdependence Determines When More Talent Is Too Much or Not Enough

Psychological Science 2014, Vol. 25(8) 1581–1591 © The Author(s) 2014 Reprints and permissions: sagepub.com/journals/Permissions.nav DOI: 10.1177/0956/97614537280 pss.sagepub.com



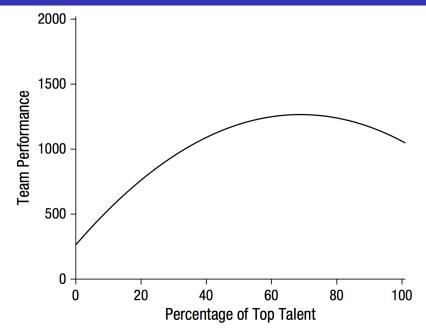


#### Roderick I. Swaab<sup>1</sup>, Michael Schaerer<sup>1</sup>, Eric M. Anicich<sup>2</sup>, Richard Ronay<sup>3</sup>, and Adam D. Galinsky<sup>2</sup>

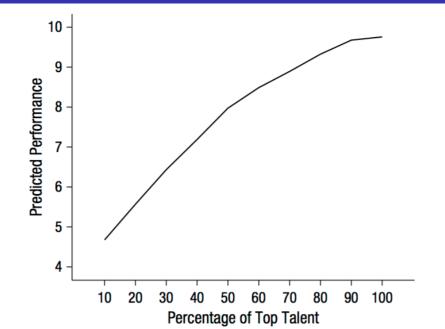
<sup>1</sup>Organisational Behaviour Area, INSEAD, Fontainebleau, France; <sup>2</sup>Management Department, Columbia University; and <sup>3</sup>Department of Social and Organizational Psychology, VU University Amsterdam



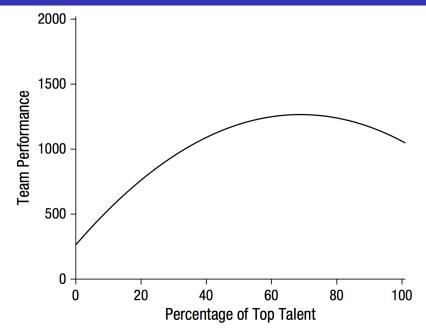
### The curve they fit to the data



### What ordinary people expected to see



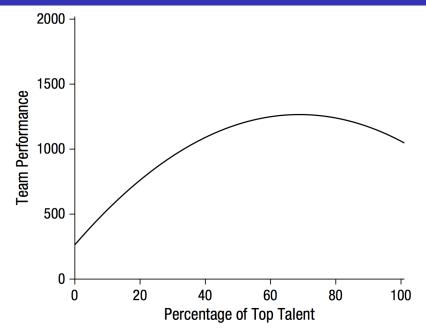
### The curve they fit to the data



### Table 1. Descriptive Statistics and Correlations in Study 2

Measure	M	SD
1. Team performance (points)	393.30	320.12
2. Top-talent percentage	7%	16%
3. Roster size	18.53	6.79
4. Games played	8.90	4.65

### The curve they fit to the data ...



### ... the data!

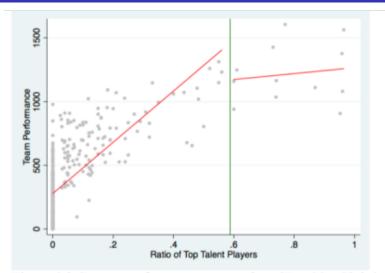


Figure 3d. Soccer performance – top talent (Top 20+ Clubs). S&N test reveals that the first slope is significant and positive  $(p \le .001)$  and that the second slope is not significant (p = .53).

Changing everything at once: Student-centered learning, computerized practice exercises, evaluation of student progress, and a modern syllabus to create a completely new introductory statistics course

Andrew Gelman Department of Statistics and Department of Political Science, Columbia University

Electronic Conference on Teaching Statistics, 16 May 2016

Proceedings of the National Academy of Sciences of the United States of America

CURRENT ISSUE // ARCHIVE // NEWS & MULTIMEDIA // AUTHORS // ABOUT COLLECTED ARTICLES // BROWSE BY TOP Physical and situational inequality on airplanes predicts air rage

Katherine A. DeCelles<sup>a,1</sup> and Michael I. Norton<sup>b</sup>

#### Author Affiliations

Edited by Susan T. Fiske, Princeton University, Princeton, NJ, and approved March 30, 2016 (received for review November 3, 2015)

Abstract Full Text Authors & Info SI Metrics PDF PDF + SI

#### Significance

We suggest that physical and situational inequality are built into people's everyday environments such as the modern airplane—and that exposure to these forms of inequality can trigger antisocial behavior. Analyses reveal that air rage is more common in economy class on airplanes, where inequality is physically present, and in both economy and first class when inequality is situationally salient. We extend research demonstrating that the salience of inequality decreases prosocial behavior by higher class individuals, showing that temporary exposure to physical and situational inequality predicts antisocial behavior among individuals in both higher and lower classes. Moreover, we explore a novel predictor of inequality-induced antisocial behavior—the design of physical environments exponenting research and another of inequality.



# First-class cabin fuels **'air rage'** among passengers flying coach, **study** says

Los Angeles Times - 5 hours ago

If you've felt your blood pressure rise after seeing passengers being served champagne on the tarmac while you're fighting for overhead space in coach, you are not alone. A new **study** finds that class division in the skies can have a real and ...



# Air rage triggered by walking past first-class seating, study says CNN - 20 hours ago

(CNN) What is it about **air** travel that brings out the worst in us? We squabble for space in the overhead compartment and on the armrest. Some passengers have even been caught kicking each other and screaming at the **flight** crew, as YouTube videos bear ...

#### Higher Rates of 'Air Rage' Linked to Flights With First-Class Cabin, Study Finds

#### ABC News - 18 hours ago

Researchers from the University of Toronto examined how having a first-class cabin on board and having passengers walk through that cabin was associated with an increase of "air rage" incidents, where passengers become unruly or abusive. The **study** was ...



#### 'Air rage' largely based on seat class, study finds

CTV News - 20 hours ago

That feeling lies behind her latest paper, published Monday, which concludes that inequality between seat classes is the largest single contributor to **air rage**. The effect intensifies, DeCelles suggests, when the plebes file past the high rollers ...

### Link Between Presence of First Class Cabin and Air Rage, Study Says KMBZ - 19 hours ago

# Statistical Modeling, Causal Inference, and Social Science HOME BOOKS BLOGROLL SPONSORS AUTHORS FEED

# Ahhhh, PPNAS!

Posted by Andrew on 3 May 2016, 9:55 am

A psychology researcher sent me an email with subject line, "There's a hell of a paper coming out in PPNAS today." He sent me a copy of the paper, "Physical and situational inequality on airplanes predicts air rage," by Katherine DeCelles and Michael Norton, edited by Susan Fiske, and it

### tl;dr summary

NPR will love this paper. It directly targets their demographic of people who are rich enough to fly a lot but not rich enough to fly first class, and who think that inequality is the cause of the world's ills. **Sepp** says: May 4, 2016 at 12:57 am (Edit)

Why the dig at NPR? And why the implication that NPR listeners cannot distinguish good scientific articles from bad ones that agree with listeners' values? On that note, why the implicit indictment of said values (i.e. the desire to reduce inequality, etc.)? I find these statements saddening and confusing.



y Andrew on 3 May 2016, 12:32 pm





## Air rage is more common on flights with firstclass cabins, via @qz





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### 13.7 COSMOS & CUITURE COMMENTARY ON SCIENCE AND SOCIETY

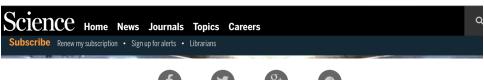
CULTURE

### The Airplane As A Microcosm Of Class Divisions

May 13, 2016 · 4:03 PM ET Commentary







# Air rage? Blame the first-class cabin

By Ben Panko | May. 2, 2016, 3:00 PM

It started commonly enough—a group of tourists returning to China from Thailand complained to the staff on their airplane about not being able to sit together. But one member of the group then threatened to blow up the plane after not getting their request, while another later threw a cup of boiling hot water onto a flight attendant after she couldn't give him change in Chinese currency. Such "air rage" incidents are on the rise, and a new study may reveal why. After analyzing data on "disruptive passenger incidents" from an airline company's database of millions of domestic and international airline flights, researchers found that **flights with a first-class section were nearly fou times more likely to have air rage incidents in their economy class**, and that these



#### Envy at 30,000 feet

# Resentment of first-class passengers can be a cause of air rage

May 11th 2016, 12:05 BY A.W. | WASHINGTON, DC

Published in the *Proceedings of the National Academy of Sciences* the study finds that passengers in economy class are 3.8 times more likely to become unruly if the plane also contains a first-class section. If those passengers have to walk through first class to get to their seats, their odds of experiencing air rage double again. "We suggest that physical and situational inequality are built into people's everyday environments—such as the modern plane—and that exposure to these forms of inequality can trigger anti-social behaviour," write the paper's authors, Katherine DeCelles of the University of Toronto and Michael Norton of Harvard.

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#### Proceedings of the National Academy of Sciences of the United States of America

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Proceedings of the National Academy of Sciences of the United States of America

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[PDF] Michael Norton - HBS People Space - Harvard Business ... www.people.hbs.edu/mnorton/norton.pdf ▼ Harvard Business School ▼ Nov 3, 2009 - Susan Fiske, Danny Kahneman, Debbie Prentice. September 1998 ... Michael Norton, Derek Rucker, and Cait Lamberton (Eds.) (2015).

# Ahhhh, PPNAS! - Statistical Modeling, Causal Inference, and ... and rewgelman.com/2016/05/03/ahhhh-ppnas/ -

May 3, 2016 - ... "Physical and situational inequality on airplanes predicts air rage," by Katherine DeCelles and Michael Norton, edited by Susan Fiske, and it ...

# This Old Stereotype: The Pervasiveness and Persistence of the Elderly Stereotype

Amy J. C. Cuddy\*

Princeton University

#### **Michael I. Norton**

Massachusetts Institute of Technology

#### Susan T. Fiske

Princeton University

Americans stereotype elderly people as warm and incompetent, following from perceptions of them as noncompetitive and low status, respectively. This article extends existing research regarding stereotyping of older people in two ways. First, we discuss whether the mixed elderly stereotype is unique to American culture. Data from six non-U.S. countries, including three collectivist cultures, demonstrate elderly stereotypes are consistent across varied cultures. Second, we investigate



SCIENCE THE STATE OF THE UNIVERSE.

JAN. 19 2016 8:00 AM

# The Power of the "Power Pose"

Amy Cuddy's famous finding is the latest example of scientific overreach.



By Andrew Gelman and Kaiser Fung

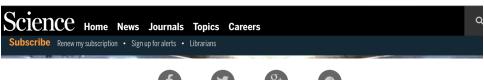
Nick says: January 27, 2016 at 7:44 pm (Edit)

Oh, and while we're on the subject of sloppy reporting, have a look at 10.1111/j.1540-4560.2005.00405.x and calculate the t statistics and associated p values.

#### Results

We created a composite score of warmth by averaging the three warmth items,  $\alpha = .81$ . A one-way ANOVA revealed the predicted main effect on this score, F(2, 52) = 3.93, p < .03, such that participants rated the high-incompetence elderly person as warmer (M = 7.47, SD = .73) than the low-incompetence (M = 6.85, SD = 1.28) and control (M = 6.59, SD = .87) elderly targets. Paired comparisons supported these findings, that the high-incompetence elderly person was rated as warmer than both the low-incompetence and control elderly targets, t(35) = 5.03 and t(34) = 11.14, respectively, both ps < .01. In addition, reflecting the persistence of the stereotype of elderly people as incompetent, participants saw targets as equally (in)competent in all conditions, F(2, 52) = 1.32, *n.s.* 

it's between-person. But then don't you need to know the N's for each of the 3 conditions? If we assume N=18, 18, 19, then the correct t statistics are  $(7.47 - 6.85)/sqrt(.73^2/18 + 1.28^2/18) = 1.79$  and  $(7.47 - 6.59)/sqrt(.73^2/18 + .87^2/19) = 3.34$ , respectively.



# Air rage? Blame the first-class cabin

By Ben Panko | May. 2, 2016, 3:00 PM

It started commonly enough—a group of tourists returning to China from Thailand complained to the staff on their airplane about not being able to sit together. But one member of the group then threatened to blow up the plane after not getting their request, while another later threw a cup of boiling hot water onto a flight attendant after she couldn't give him change in Chinese currency. Such "air rage" incidents are on the rise, and a new study may reveal why. After analyzing data on "disruptive passenger incidents" from an airline company's database of millions of domestic and international airline flights, researchers found that **flights with a first-class section were nearly fou times more likely to have air rage incidents in their economy class**, and that these

Variable	Model 1	Model 2	Model 3	
Dependent variable	Economy class incident	Economy class incident	First class incident	
Dataset	All flights	Flights with first class	Flights with first class	
Predictor variables				
Economy seats	1.0010 (0.0012)	1.0031** (0.0014)	_	
First class seats	_	_	1.0342** (0.0139)	
Economy seat width (cm)	0.9514* (0.0243)	1.2175*** (0.0922)	_	
Economy seat pitch (cm)	0.9887 (0.0101)	1.0093 (0.0125)	_	
First class seat width (cm) <sup>+</sup>	_	_	0.8147 (0.1101)	
Flight distance in miles	1.0004**** (0.0001)	1.0004**** (0.0001)	1.0003** (0.0001)	
Flight delay in hours	1.1524**** (0.0151)	1.1393**** (0.0157)	1.0526 (0.0468)	
Cabin area (m²)	1.1186** (0.0528)	1.1213** (0.0610)	1.4777*** (0.1969)	
International flight $(1 = yes)$	0.6840**** (0.0681)	0.7185*** (0.0720)	0.8212 (0.1869)	
First class present (1 = yes)	3.8431**** (0.4743)	_		
Boarding from front $(1 = yes)$	_	2.1754*** (0.6083)	11.8594** (11.8367)	
McFadden's pseudo R <sup>2</sup>	0.1028	0.0578	0.0675	

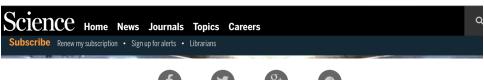
#### Table 2. Logistic regression models predicting onboard incidents

Values presented are odds ratios with robust SEs. The full dataset represented ~150–300 unique arrival and departure airports, and between 500 and 1,000 unique flight routes. SEs are adjusted clusters based on plane route (i.e., the specific departure airport and arrival airport combination). All models include fixed effects for flight regions (suppressed for space but included in *SI Methods*). Observations were dropped because they were in a flight region that had no incidents. Flights with first class present are ~46.1% of the population of flights. No flights without first class boarded from the middle of the plane. \*P < 0.10, \*\*P < 0.05, \*\*\*P < 0.001.

<sup>†</sup>Seat pitch data are not available because many first class seats had their own pods/beds.



The premise of this `study' seems flawed. Nobody in economy sees the people in first class or business class enjoying themselves. I suspect, as others have noted, that the cause of rage here is much simpler. Flights with a first class tend to be long-haul flights, where those in economy class have more time to (a) endure their plight and (b) drink.



# Air rage? Blame the first-class cabin

By Ben Panko | May. 2, 2016, 3:00 PM

It started commonly enough—a group of tourists returning to China from Thailand complained to the staff on their airplane about not being able to sit together. But one member of the group then threatened to blow up the plane after not getting their request, while another later threw a cup of boiling hot water onto a flight attendant after she couldn't give him change in Chinese currency. Such "air rage" incidents are on the rise, and a new study may reveal why. After analyzing data on "disruptive passenger incidents" from an airline company's database of millions of domestic and international airline flights, researchers found that **flights with a first-class section were nearly fou times more likely to have air rage incidents in their economy class**, and that these

## Stat rage? Blame statistics instruction.

### Data Analysis Using Regression and Multilevel/Hierarchical Models

Andrew Gelman, Columbia University, New York Jennifer Hill, Columbia University, New York DATE PUBLISHED: December 2006

```
lm(formula = log(weight) ~ log(canopy.volume) + log(canopy.area) +
   log(canopy.shape) + log(total.height) + log(density) + group)
                 coef.est coef.se
(Intercept)
                     5.35
                            0.17
log(canopy.volume)
                    0.37 0.28
log(canopy.area) 0.40 0.29
log(canopy.shape) -0.38 0.23
log(total.height) 0.39 0.31
log(density)
                   0.11
                            0.12
                    -0.58
                            0.13
group
 n = 46, k = 7
 residual sd = 0.33, R-Squared = 0.89
```

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Andrew Gelman, Columbia University, New York Jennifer Hill, Columbia University, New York DATE PUBLISHED: December 2006

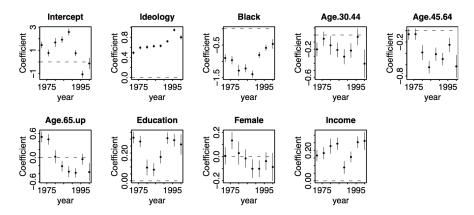


Figure 4.6 Estimated coefficients (and 50% intervals) for the regression of party identifi-

- Student-centered learning
- Computerized practice exercises
- Evaluation of student progress
- A modern syllabus

### History [edit]

Just-in-Time Teaching was developed for university level physics instructors in the late 1990s, but its use has since spread to many other academic disciplines. Early work was done in the physics department at Indiana University – Purdue University Indianapolis (IUPUI) in collaboration with

# What is Just-in-Time Teaching? G. Novak, gnovak@iupui.edu

Just-in-Time Teaching (JiTT for short) is a teaching and learning strategy based on the interaction between web-based study assignments and an active learner classroom. Students respond electronically to carefully constructed web-based assignments which are due shortly before class, and the instructor reads the student submissions "just-in-time" to adjust the classroom lesson to suit the students' needs. Thus, the heart of JiTT is the "feedback loop" formed by the students' outside-of-class preparation that fundamentally affects what happens during the subsequent in-class time together.

# Peer instruction

From Wikipedia, the free encyclopedia

**Peer instruction** is an evidence-based, interactive teaching method developed by Harvard Professor Eric Mazur in the early 1990s.<sup>[1]</sup> Originally used to improve learning in introductory undergraduate physics classes at Harvard University, peer instruction is used in various disciplines and institutions around the globe. It is a student-centered approach that involves flipping the traditional classroom by moving information transfer out and moving information assimilation, or application of learning, into the classroom.

Case study: The sampling distribution of the sample mean.

- Student-centered learning
- Computerized practice exercises
- Evaluation of student progress
- A modern syllabus