

Incredible Science (11):

From the secret archives of the IgNobel committee

Snorers Write Poor Exam Results

Among the favourite subjects of the IgNobel Awards committee are unresolved issues surrounding relationships between cause and effect. For example: the more storks living in a village, the more children are around. Coincidence or fact? The correlation exists. However, the real cause behind the baby boom is that in larger villages there is logically more space, meaning more people, leading to more babies but also more buildings. More buildings mean more nesting places for storks...

How about the following observation, which was published in 1999 by five researchers from the university hospital in Erlangen, Germany? The authors queried about 200 students during their final examinations in internal medicine by sneaking an additional question into the multiple-choice test. Thus, question number 46 (which was not rated) read:

- (A) I have never been told that I snore.
- (B) I snore occasionally.
- (C) I snore frequently.

Three quarters of the low-brow students were happy to answer this simple question and, in addition, revealed their age, sex, height and weight. The result: on average, the 39 percent self-reported, non-snorers had 31 correct answers to the 45 exam questions, whereas the occasional snorers achieved 29 correct answers. The



The author, Mark Benecke, is Co-Editor of the *Annals of Improbable Research* that annually presents the IgNobel Awards in Cambridge, USA

lowest performance was seen by the frequent snorers with only 27 faultless answers.

An even more disastrous picture emerged when focussing only on the students that failed the

exam. 42 percent of them were “super-snorers”, 22 percent snored occasionally and only 13 percent of them were quiet sleepers.

In addition, it became apparent that the body-mass-index went up in parallel with an increase in snoring intensity. Furthermore, most of the strong snorers were male.

Of course, the investigators presumed that snoring was not the “one and only” cause for the observed lack of performance (even if snoring results in fragmented sleep and/or sleep apnoea, which in turn leads to oxygen decrease in the blood and, subsequently, in the brain). Instead, they inverted the argument and suggested that people who drink a lot of alcohol and take drugs snore more frequently. It couldn't be revealed during the exam whether certain stimulants, often taken by students, might cause this effect.

IgNobel's final assessment: remains in the drawer for resubmission.

(Ficker J., Wiest G., Lehnert G., Meyer M., Hahn E. (1999)

Are Snoring Medical Students at Risk of Failing their Exams. Sleep 22: 205-9)