

DZG
2010
HAMBURG

ID, Creationism, and other Superstitions at Secondary Schools in Austria

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- What do secondary school pupils think about the origin of life?
- Does agreement to evolution increase with age/grade?
- Do paranormal beliefs correlate with opinions about evolution?
- Are faith and “superstitions” antagonists or not?

Darwin

or

God?

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- rPBS (Paranormal Belief Scale, Tobacyk 2004)
- 3 statements on the descent of life (fowid 2005)

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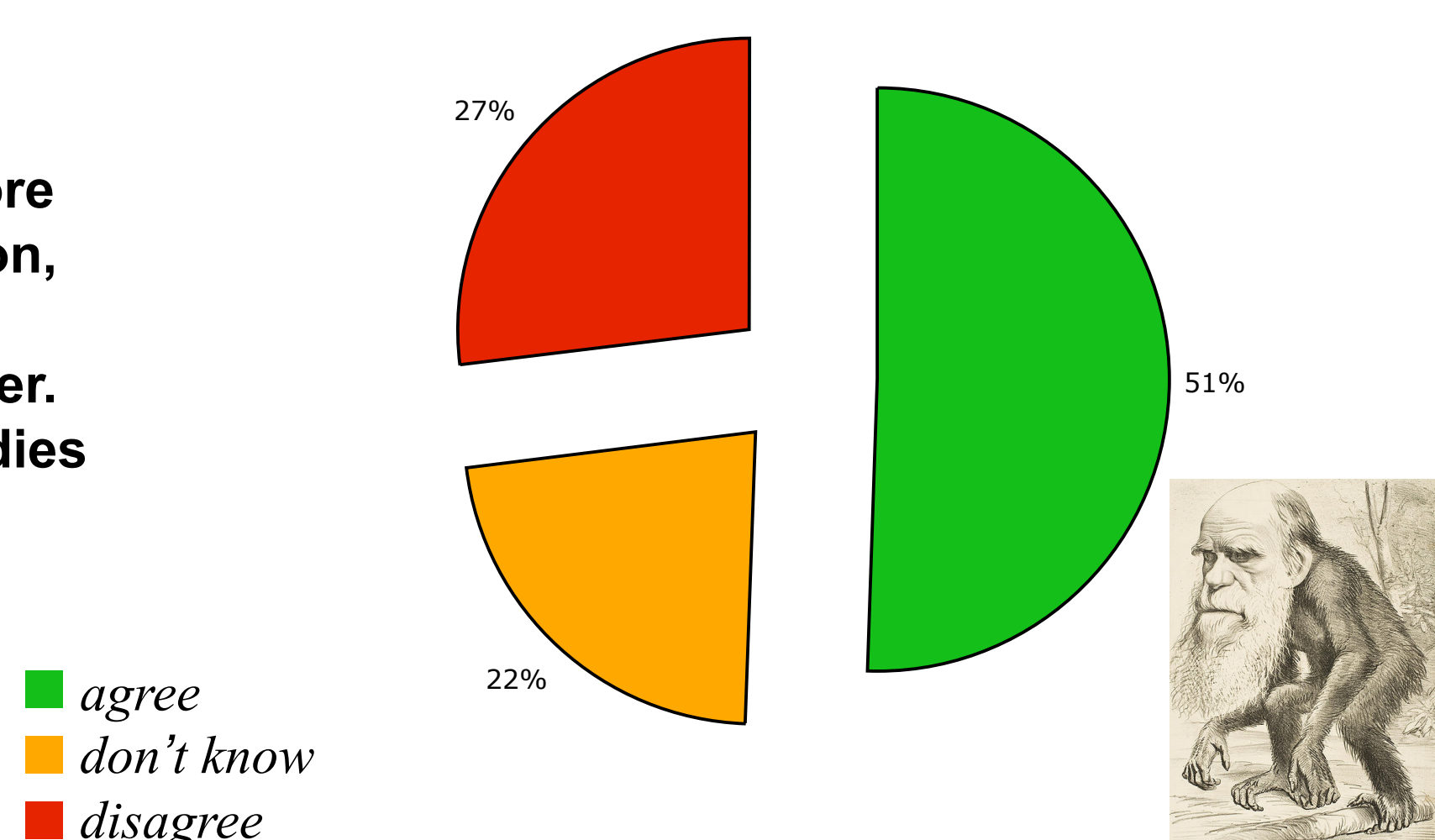
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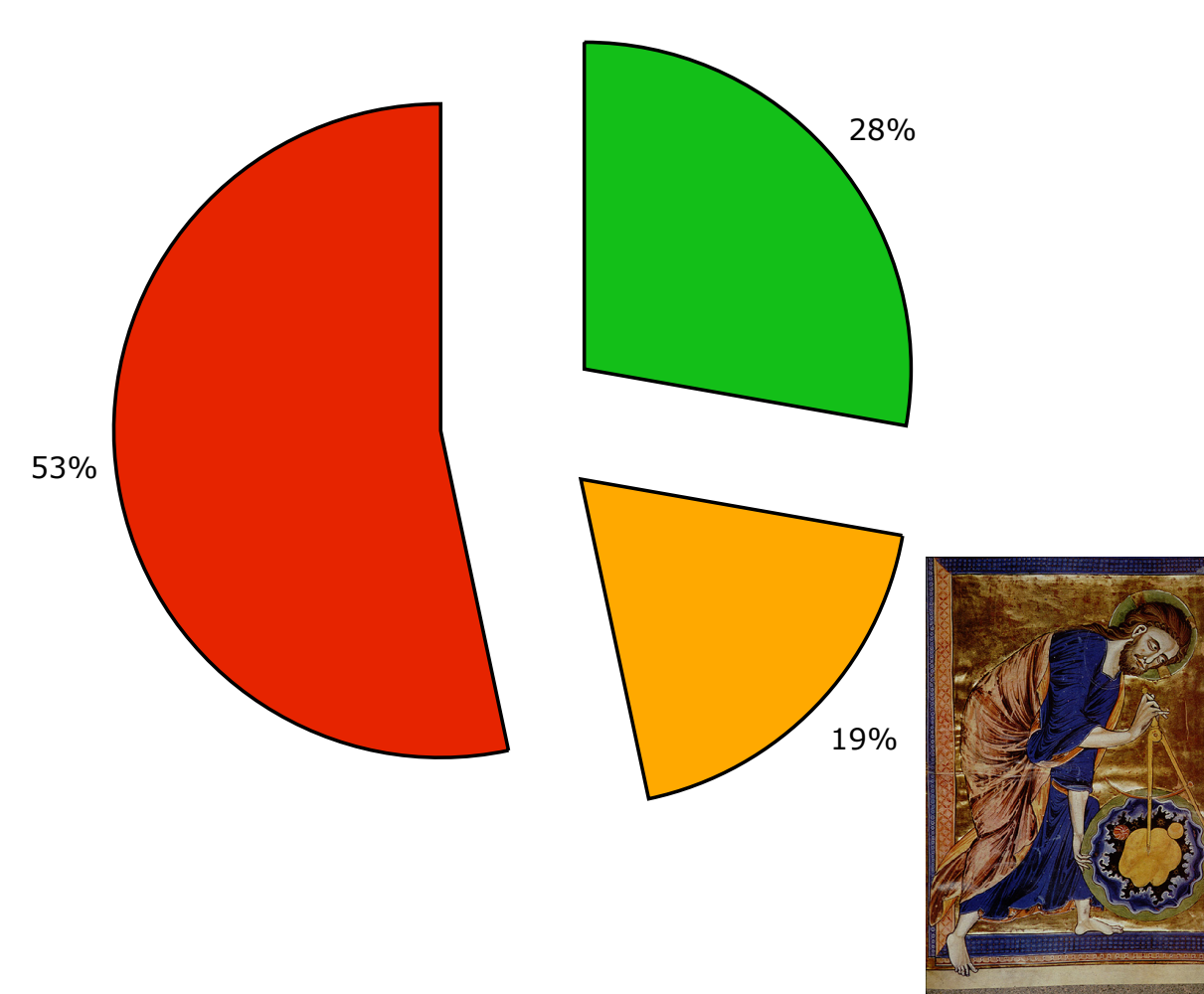
Evolution?

Little more than half of the students agree with naturalistic evolution, more than a third with ID / theistic evolution, and 28% with creationism, the latter two closely correlated with each other. This corresponds with previous studies on adult Austrians.

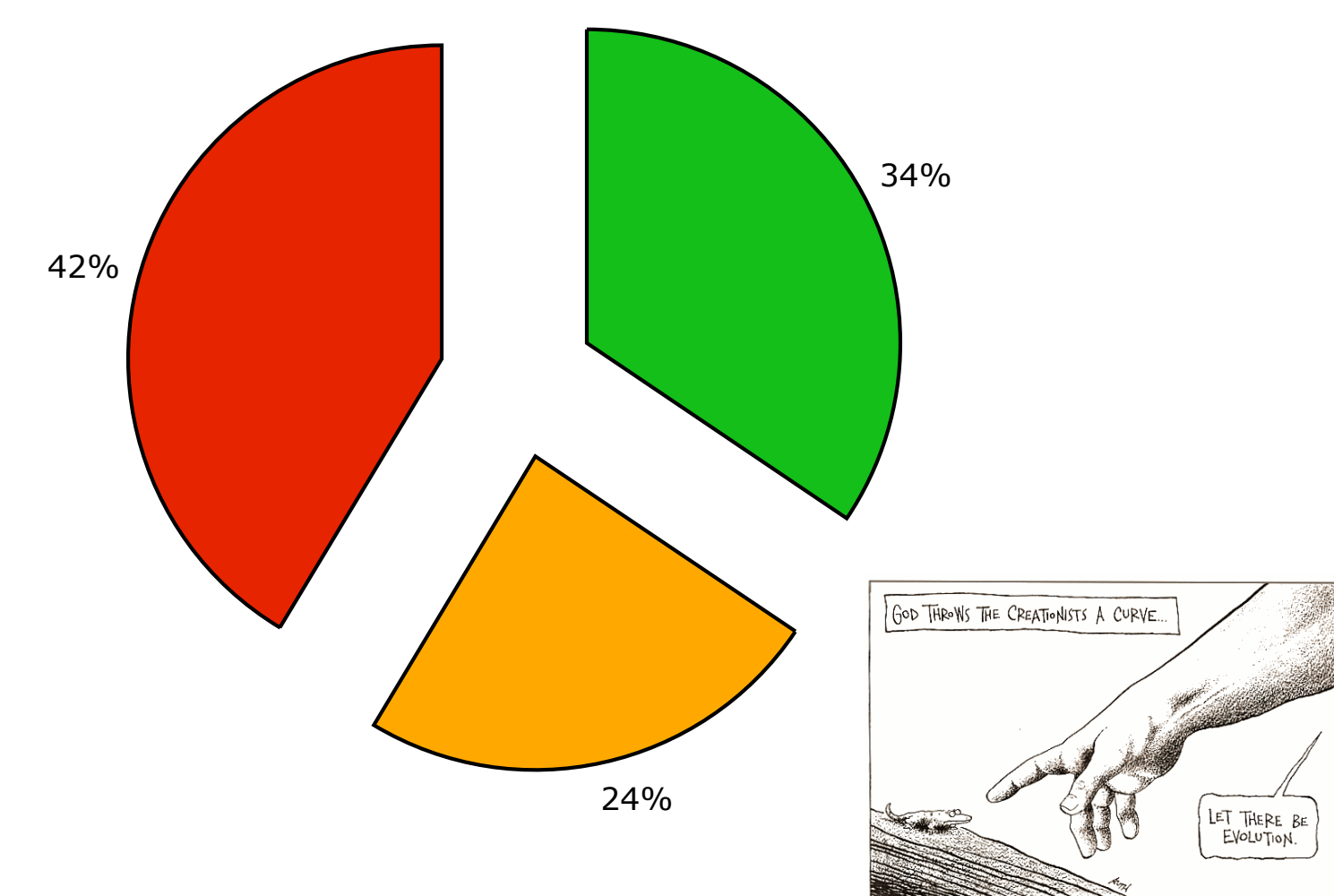
“Life on earth has emerged without the influence of any supreme being and has evolved through a natural developmental process.”



“God directly created life on earth, including all species, as described in the Bible (Koran).”



“Life on earth was created by a supreme being (God), and has undergone a long developmental process directed by this supreme being (God).”



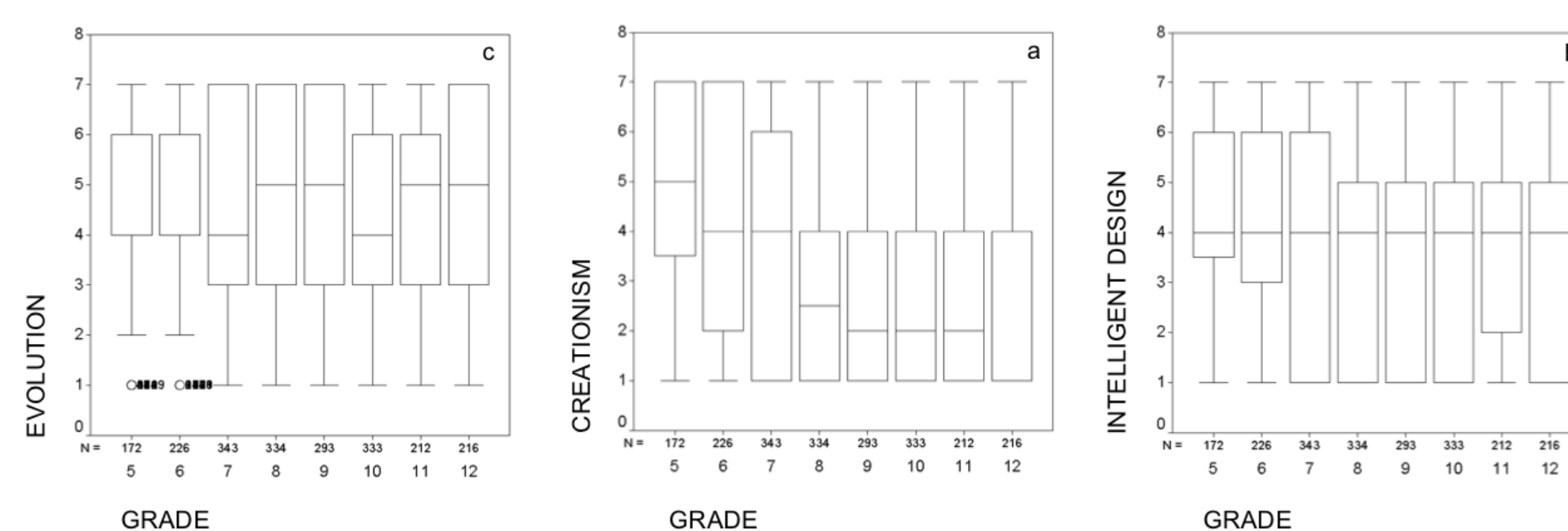
The top 5

With an average rPBS score of 82, Viennese secondary school students show a lower paranormal belief than e.g. Vienna psychology students (Hergovich & Arendasay 2005). Remarkably, the naturalistic definition of evolution can be found among the top 5 statements the students agreed with. Three of the other statements are traditional religious beliefs, none of them belongs to “new age” esoteric ideas.

1. I believe in God.
2. There is life on other planets.
3. The soul continues to exist though the body may die.
4. Life on earth has emerged without the influence of any supreme being and has evolved through a natural developmental process.
5. There is a heaven and a hell.

Evolution and grade/age

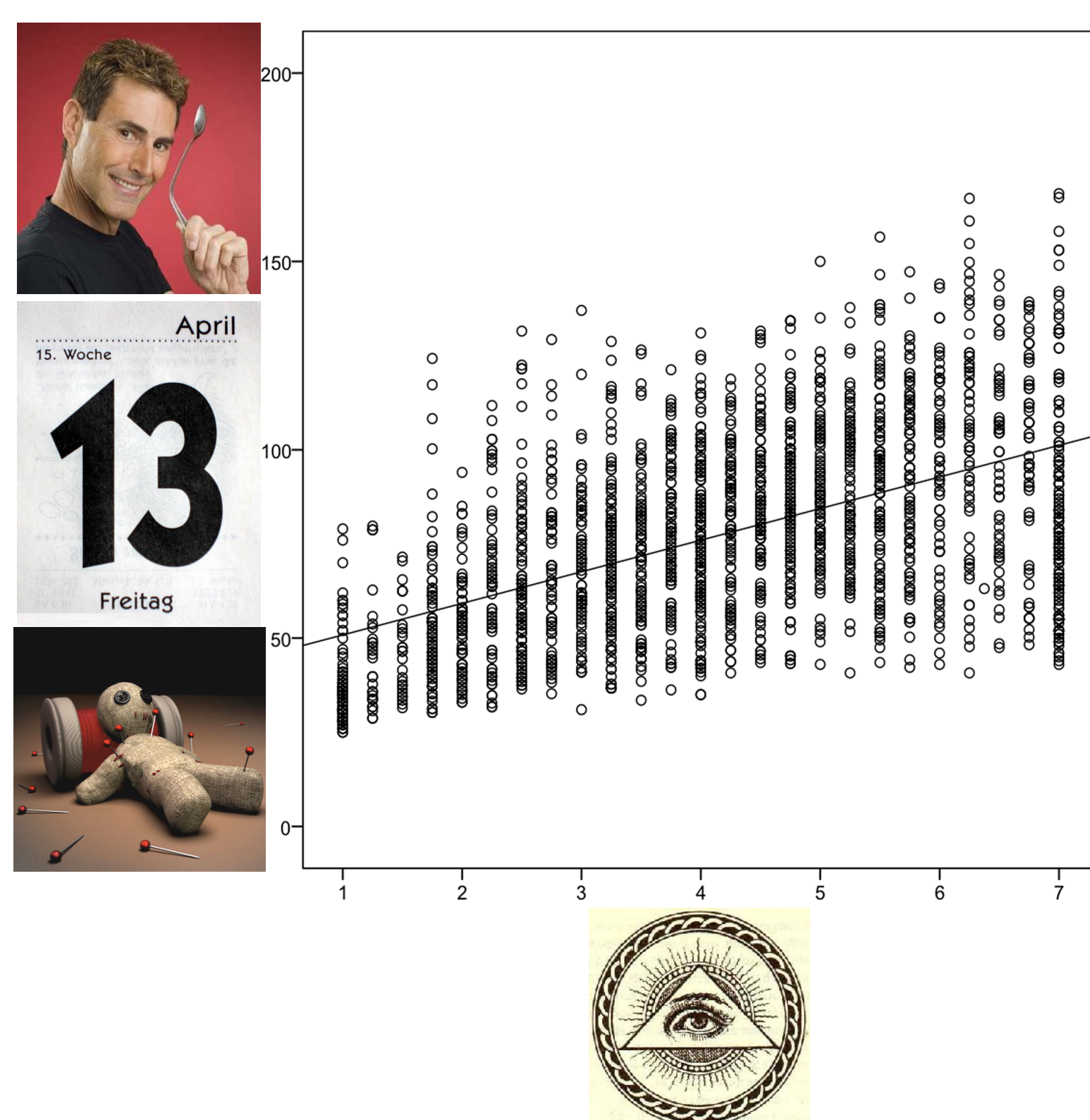
Surprisingly, we could not observe any significant change of agreement with naturalistic evolution within the eight years of secondary school. However, there was a highly significant negative correlation between belief in ID and in creationism and grades. Note the change at grade 7, when the biology curriculum treats evolution for the first time.



Faith and the paranormal

Contrary to the “substitution hypothesis”, we found a significant positive correlation between traditional religious belief and other paranormal claims usually called “superstitions”. It seems that one who believes, tends to believe anything...

Note that there are no atheists/agnostics with remarkably high paranormal beliefs – but there are several strong religious students with considerably low other paranormal beliefs: according to McKinnon (2003) they could be regular church attendants.



Origin of life and the paranormal

As expected, religious belief and evolution correlate negatively. There is no significant correlation between evolution and other paranormal claims.

However, Intelligent Design and creationism do not only significantly correlate with religious but also with other paranormal beliefs.

		CREA	ID	TRAD	R-PBS
EVO	Pearson's r	-0.31	-0.34	-0.29	-0.01
	r^2	0.10	0.12	0.08	0.00
	P	0.0000	0.0000	0.0000	0.0800
CREA	Pearson's r		0.59	0.60	0.00
	r^2		0.34	0.36	0.00
	P		0.0000	0.0000	0.0000
ID	Pearson's r			0.65	0.00
	r^2			0.43	0.00
	P			0.0000	0.0000
TRAD	Pearson's r				0.00
	r^2				0.00
	P				0.0000

Science education

We urge a change in the Austrian syllabus of biology towards an immanent evolutionary understanding in all grades instead of the common “natural history” approach, and we propose a concept change from merely subject-oriented lessons towards a comprehensive teaching of science as a unifying concept of physics, chemistry, and biology. We finally agree with Martin (1994) that science education has to accept the challenge of paranormal and pseudoscientific claims and must not ignore them, no just “to understand science but to be scientific, that is, to tend to think and act in a scientific manner in their daily lives” (Martin, 1994).