

20121001 - Judgements of likelihood under hypoxic conditions - 2010

[Data] [[<Normal page](#)] [**PEREZGONZALEZ Jose D [ed] (2012)**]. *Judgements of likelihood under hypoxic conditions*. Journal of Knowledge Advancement & Integration ([ISSN 1177-4576](#)), 2012, pages 264-266.]

Mild hypoxia and optimistic judgement

Gilbey et al (2010¹) carried out a pilot study for ascertaining whether mild hypoxia² led to more optimistic (or pessimistic) judgements about the likelihood of life events than otherwise.

Their results showed that a small group of participants did not change or only slightly changed their judgements about life events under normal and hypoxic conditions (see illustration 1). That is, overall optimistic judgement did not change but remained slightly above average. Particular judgements did increase or decrease slightly depending on the condition, but perhaps not enough as for suggesting a sensible effect of mild hypoxia on judgement. Changes occurred in either direction, depending on the judgement, and so there was no tendency for just optimism (or pessimism) to appear more extreme under mildly hypoxic conditions than under normal conditions within this group.

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Illustration 1: Likelihood under normal and hypoxic conditions		
	Normoxia	Hypoxia
Overall judgement of likelihood	Little above avrg	Little above avrg
Items included in group analysis		
	Normoxia	Hypoxia
Maintaining good relationships with relatives	Little above avrg	Above avrg
Staying healthy and fit to an old age	Little above avrg	Above avrg
Not being fired from a job	Little above avrg	Little above avrg
Falling or staying in love	Above avrg	Little above avrg
Not becoming sterile	Little above avrg	Little above avrg
Not developing a drinking problem	Above avrg	Above avrg
Not attempting suicide	Above avrg	Above avrg
Having a successful career	Little above avrg	Little above avrg
Not having a heart attack before 40	Little above avrg	Little above avrg
Traveling extensively	Little above avrg	Little above avrg
Liking my job	Little above avrg	Little above avrg
Not getting infected with Aids	Above avrg	Above avrg
Items excluded from group analysis		

Living beyond 80	Average	Average
Getting a wonderful surprise next birthday	Average	Average
Not contracting cancer	Average	Average
Not being a victim of theft	Average	Average
<i>(Mean values on a scale ranging between 'Much below average' to 'Much above average')</i>		

Methods

Design and materials

- This was a pilot study carried out for comparing judgements of likelihood made when at different altitudes (at sea level, and at approximately 2,400 meters / 8,000 feet above sea level). The study was done in a laboratory, and only the oxygen levels at those two altitudes were simulated, which was done with the help of an hypoxicator. All participants went through both conditions.
- A questionnaire with 16 life-events (8 positive and 8 negative) was created for the purpose. The participants had to decide how likely it was for people like them to experience those events. The range of decisions went from 'Much below average' to 'Much above average'.

Sample

- 15 male university students, both undergraduate and postgraduate, with no health problems, participated in the study.

Data analysis

- The authors screened out four items which showed no bias towards optimism or pessimism (thus, being merely average). The authors argued it was so done in order to focus on the items biased towards optimism only. This post-hoc reasoning seems plausible insofar the questionnaire was an ad-hoc tool compiled for this study and not a validated tool for measuring unrealistic optimism. However, it is also possible that the authors were simply "cherry picking" the most promising results in order to have as large a difference as they could when adding up the group's total.
- The results of main interest were mean values per life-event, as well as the group total. (These values are transformed into labels in this article, according to the following convention: 1.00-1.49, Much below average; 1.50-2.49, Below average; 2.50-3.49, Little below average; 3.50-4.49, Average; 4.50-5.49, Little above average; 5.50-6.49, Above average; 6.50-7.00, Much above average.)

References

1. **GILBEY Andrew, Toby MUNDEL, Stephen LEGG, Stephen HILL, Zac SCHLADER & Aaron RAMON (2010).** [A pilot test of the effect of mild-hypoxia on unrealistically optimistic risk judgements.](#) Aviation Education and Research Proceedings (ISSN 1176-0729), 2010, pages 7-12.

+++ **Notes** +++

2. Such as that experienced at 4,200 meters (8,000 feet) of altitude.

Want to know more?

Further knowledge about this study

You can find more detailed [descriptive statistics](#) on Wiki of Science, or access the [original article](#).

