

# What does the public want to know about the brain?

Scientists commonly assume that the public is most interested in research with short-term medical applications<sup>1</sup>, but this may not be a correct assumption for neuroscientists. According to the findings presented here, brain-related research topics with implications for everyday life, such as memory and emotion, elicit much more public interest than do topics such as brain diseases and therapies.

On a Brazilian internet website, O Cérebro Nosso de Cada Dia ("Our Daily Brain", <http://www.cerebronosso.bio.br>), I conducted an on-line survey to determine what the public is interested in knowing about the brain. This non-profit website, updated monthly and available since August 2000, presents neuroscience news for the general public as brief essays on topics related to everyday life, and receives more than 300 visits per day.

A total of 134 visitors (51% male, mean age  $35.0 \pm 12.4$  years) answered the survey in November/December of 2001. On a multiple-choice form online, respondents indicated their level of education and field of study, gauged their interest in movies, politics, science in general and neuroscience in particular, and chose, from a list of 18 themes about the brain, which five they would be the most and the least interested in reading about in a hypothetical popular science magazine.

Although sample selection was biased toward high interest in brain research (mean interest,  $9.1 \pm 1.4$  on a scale from 0 to 10), respondent profiles were compatible with the expected readership of popular science magazines in general<sup>2,3</sup>. Most respondents

(89.4%) had at least a college-level education and majored in biomedical sciences (31.0%), exact sciences (28.6%) or humanities (26.2%). The majority (61.2%) claimed to visit the website at least once a month, and importantly, most allegedly sought information about the brain "out of curiosity" (55.8%), rather than because of disease in their family (3.3%).

There was a clear negative correlation between the themes respondents "would read first" and those they "would read last" (Fig. 1). Memory, consciousness, learning, emotions and development, research themes with a very high growth rate in the past few years, were, in this order, the five themes most respondents would read first. In contrast, brain health, diseases and treatments ranked 8<sup>th</sup>, 14<sup>th</sup> and 10<sup>th</sup>, respectively.

How do these preferences compare to what the public actually reads when given a choice? Tracking the number of visits to individual articles listed by title or to each of 14 thematic sections in the same website showed that themes related to functional lateralization, brain size and do-it-yourself activities were the most sought by readers, whereas those concerned with brain health and diseases figured among the least visited (See Supplementary Fig. 1 online).

The distribution of visits confirms that neuroscience stories related to everyday life are more appealing to the public than health-related ones, and suggests that the chances of drawing public attention to neuroscience discoveries can be greatly enhanced if information is presented with sprinkles of curiosities, corrected pop-

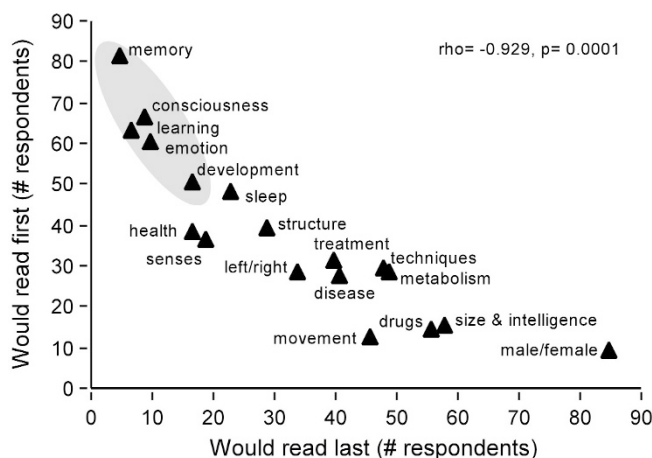
psychology brain myths<sup>4</sup> and suggestions of simple, do-it-yourself experiments that illustrate the point. Remarkably, although discoveries on brain health and disease are frequent themes in popular science magazines such as *Scientific American* and the Brazilian *SuperInteressante*, four of the five most preferred themes in the present survey figure among the least represented in these magazines (Batista, A.X., Houzel, J.C. & Herculano-Houzel, S., *Soc. Neurosci. Abstr.* 31, 159, 2001). Given that popular science magazines are, after schooling, the major factor contributing to public neuroscience literacy<sup>3</sup>, the present study indicates that they could more effectively contribute to public education about the brain by following the interests of their audience more closely. The same applies, of course, to neuroscientists who wish to reach out to the public. Even those of us who do not study brain disease have good reason to rejoice: our fellow layperson is probably much more interested in our research than we think.

Note: Supplementary information is available on the Nature Neuroscience website.

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**Fig. 1.** Which brain topics does the public prefer to read about? From a list of 18 themes, respondents were asked to indicate which five they would read first in a popular science magazine, as well as which five they would read last. Each symbol indicates the number of respondents (from a total of 134) who indicated they would read that theme first (abscissa) or last (ordinate). Spearman correlation coefficient,  $-0.929$ ,  $P = 0.0001$ . The five preferred themes are indicated in the gray area.

