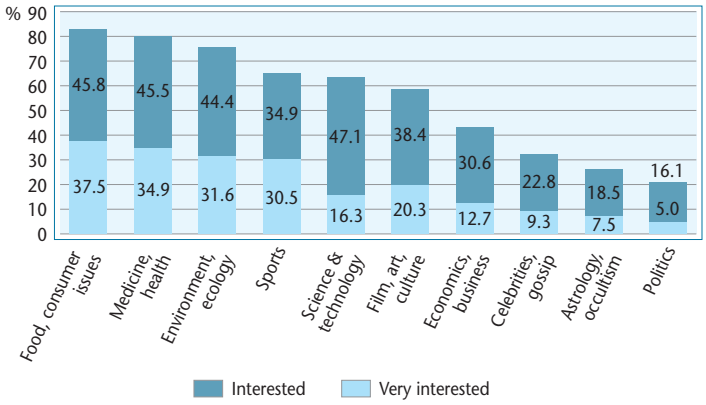
Science, Technology & Innovation Indicators in the State of São Paulo / Brazil 2010

Highlights of Chapter 12 – Public Perceptions of S&T in São Paulo State

- Public interest in science and technology is considerable in São Paulo State. The state capital is comparable to many European countries in this respect.

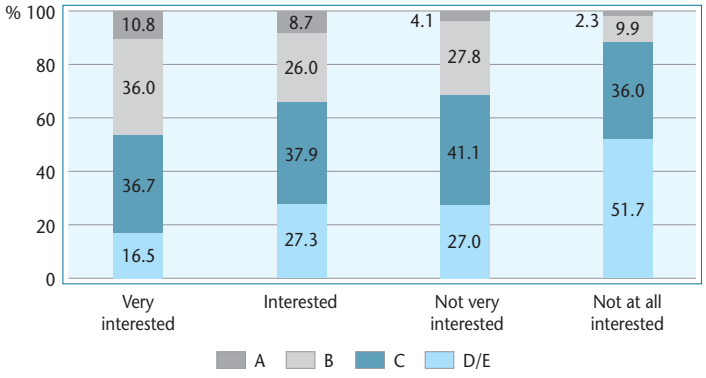
São Paulo State: Interest in S&T and other subjects, 2007



Source: Unicamp (Labjor), survey on public perceptions of S&T in São Paulo State.

- A breakdown of survey respondents by income group shows that those who said they were "not at all interested" in S&T tended to belong to classes C and D/E (87.7%), while a significant proportion of those who said they were "very interested" were in classes A and B.

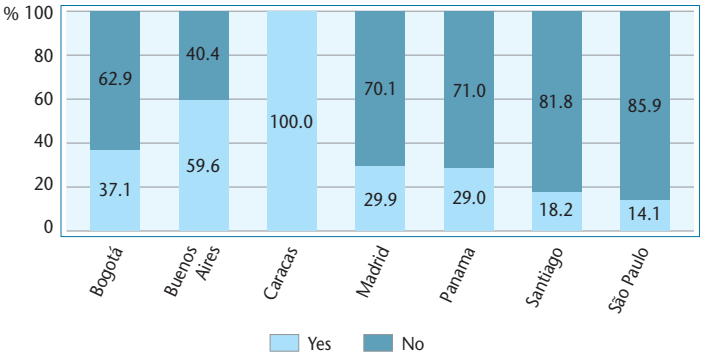
São Paulo State: Breakdown of respondents by level of interest in S&T and income group, 2007



Source: Labjor/Unicamp. Unicamp (Labjor), survey on public perceptions of S&T in São Paulo State.

- On average, attitudes[1] to S&T and the role and prestige of scientists in society were substantially positive in all social groups, albeit with varying intensity.
- The survey showed that self-declared consumption of scientific information correlates with knowledge of S&T in Brazil: while fewer than 2 out of 10 respondents could name a Brazilian science institution, the proportion who said they absorbed scientific information from the media was significantly larger (measured by the Scientific Information Consumption Index, Portuguese-language acronym ICIC).
- The public's actual knowledge of S&T is more limited in the city of São Paulo than in most Ibero-American cities surveyed, as is consumption of information on S&T. The factor that contributes most to this negative result for Brazil is extraordinary inequality of access to information, which is not the case with such intensity in the other countries surveyed.

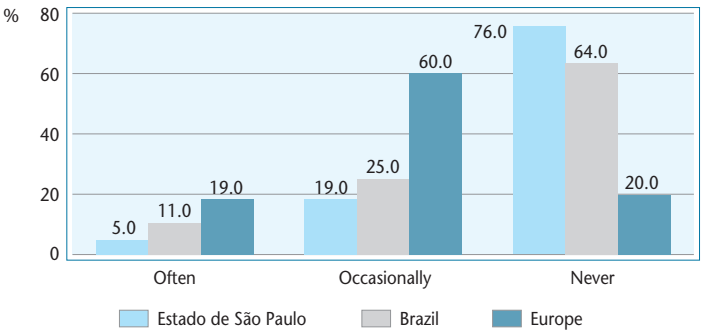
São Paulo & selected cities: Knowledge of science institutions, 2007



Source: Unicamp (Labjor), survey on public perceptions of S&T in São Paulo State; López Cerezo & Polino (2008).

- The survey showed a weak correlation between the presence of S&T infrastructure and public attitudes to S&T. The explanation may be that a large proportion of the population have no access to S&T popularisation projects or spaces even in cities with many museums, universities and technical or scientific institutions.
- In the European Union, 79% of those surveyed said they occasionally or frequently read articles about science in newspapers and magazines or on the internet. The proportion for São Paulo State is 24% (according to a statistical projection based on the survey detailed in this chapter). The Brazilian average is 36%.

São Paulo State, Brazil & Europe: Consumption of scientific information – "Do you read articles on science in newspapers or magazines or on the internet?", 2007



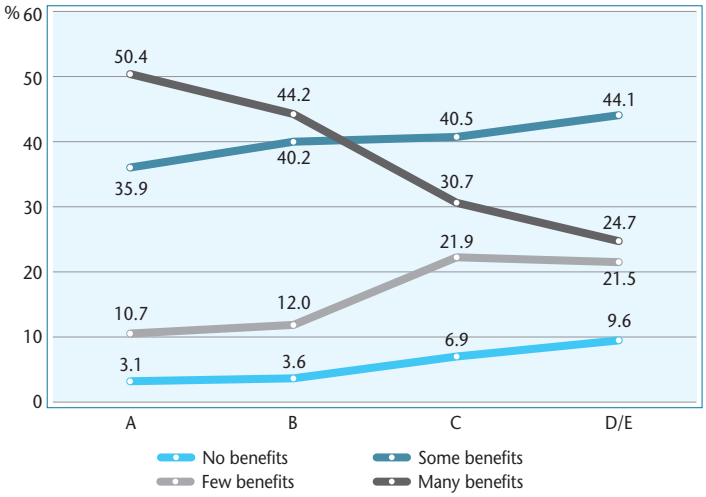
Source: Unicamp (Labjor), survey on public perceptions of S&T in São Paulo State; MCT (2007); Eurobarometer (European Commission, 2005).

- Access to zoos, parks or botanic gardens in Brazil is not less frequent than for Europeans according to Eurobarometer. In São Paulo State it is slightly more so, owing to the diversity and quantity of supply in this area.
- However, 24.1% of respondents in the city of São Paulo said they had been to a public library in the previous year, compared with 34% in the European survey. The frequency with which Europeans visit art museums is about twice as high as the survey findings for Brazil and São Paulo.

[1] Used here in the sociological sense, as defined in The Blackwell Dictionary of Sociology: "The second meaning of attitude goes beyond beliefs and values to identify a distinct aspect of how we orient ourselves to the world – emotion. In this sense of the word, [...] an attitude is a cultural orientation to something that predisposes us not only to think about it in particular ways but to have positive or negative feelings about it as well" (Johnson, 2000).

- As for visits to science museums, technology centres and the like, the findings for Europe show a frequency roughly triple that found for São Paulo State, even though the latter has many such centres and museums – more than the national average, in fact.
- Among respondents who declared themselves "Very well informed" about S&T, 72.1% said they routinely read package inserts before taking medication; 73.3% read food labels; 70.5% took notice of appliance specifications and instructions for use; 65.7% kept informed during public health campaigns; 60.6% consulted a physician when considering a diet; and 60% looked up unfamiliar words in a dictionary.
- Among those who declared high consumption of scientific information (ICIC>1: Low-medium and higher), significant proportions both strongly agreed and disagreed with the statement that science is overvalued and faith undervalued in today's society.
- These findings suggest that interest in and consumption of information about S&T do not necessarily reflect a "preference" or polarisation between science and religion or spirituality.
- Respondents in the upper income groups tended to emphasise the future benefits of S&T, while those in the lower income groups were apparently more sceptical on this front, probably because they believed that enjoying such benefits required purchasing power they lacked.

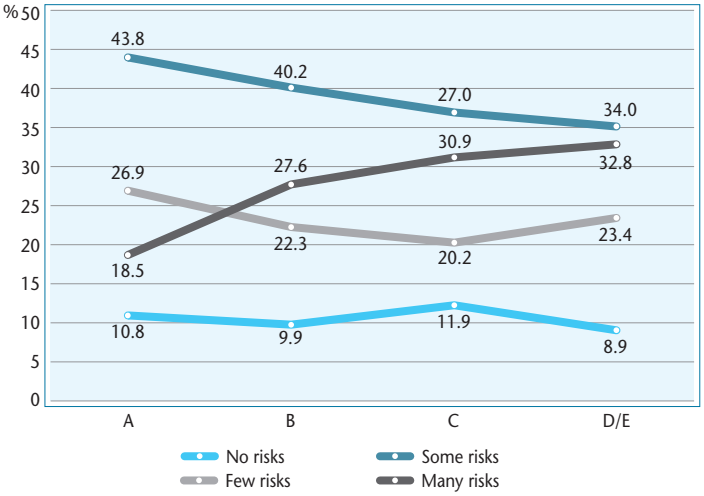
São Paulo State: Perception of future benefits of S&T by income group, 2007



Source: Unicamp (Labjor), survey on public perceptions of S&T in São Paulo State.

- At the same time, the idea of a serious threat may be more palpable to low-income respondents because environmental disasters, for which human action is often blamed, have historically tended to have a greater impact in poorer locations. Moreover, it is harder for the less well-off to overcome the harmful effects of technology (by evacuating contaminated areas, for example).

São Paulo State: Perception of future risks of S&T by income group, 2007



Source: Unicamp (Labjor), survey on public perceptions of S&T in São Paulo State.

- Curiously, interest in and consumption of S&T information are lower precisely in cities with higher per capita GDP and with top-notch research centres as well as numerous institutions dedicated to the popularisation or diffusion of scientific knowledge, such as São Paulo (Brazil) and Madrid (Spain). Self-declared interest in and consumption of S&T is much higher in cities such as Caracas (Venezuela) and Bogotá (Colombia).
- The establishment of more science museums, libraries and zoos would seem to be ineffectual as an investment if that portion of the population with the least information is also the group with the greatest difficulty in accessing such instruments.
- Social inequality was the key factor in explaining the radical differences between the responses of the various groups at practically every level of the analysis.