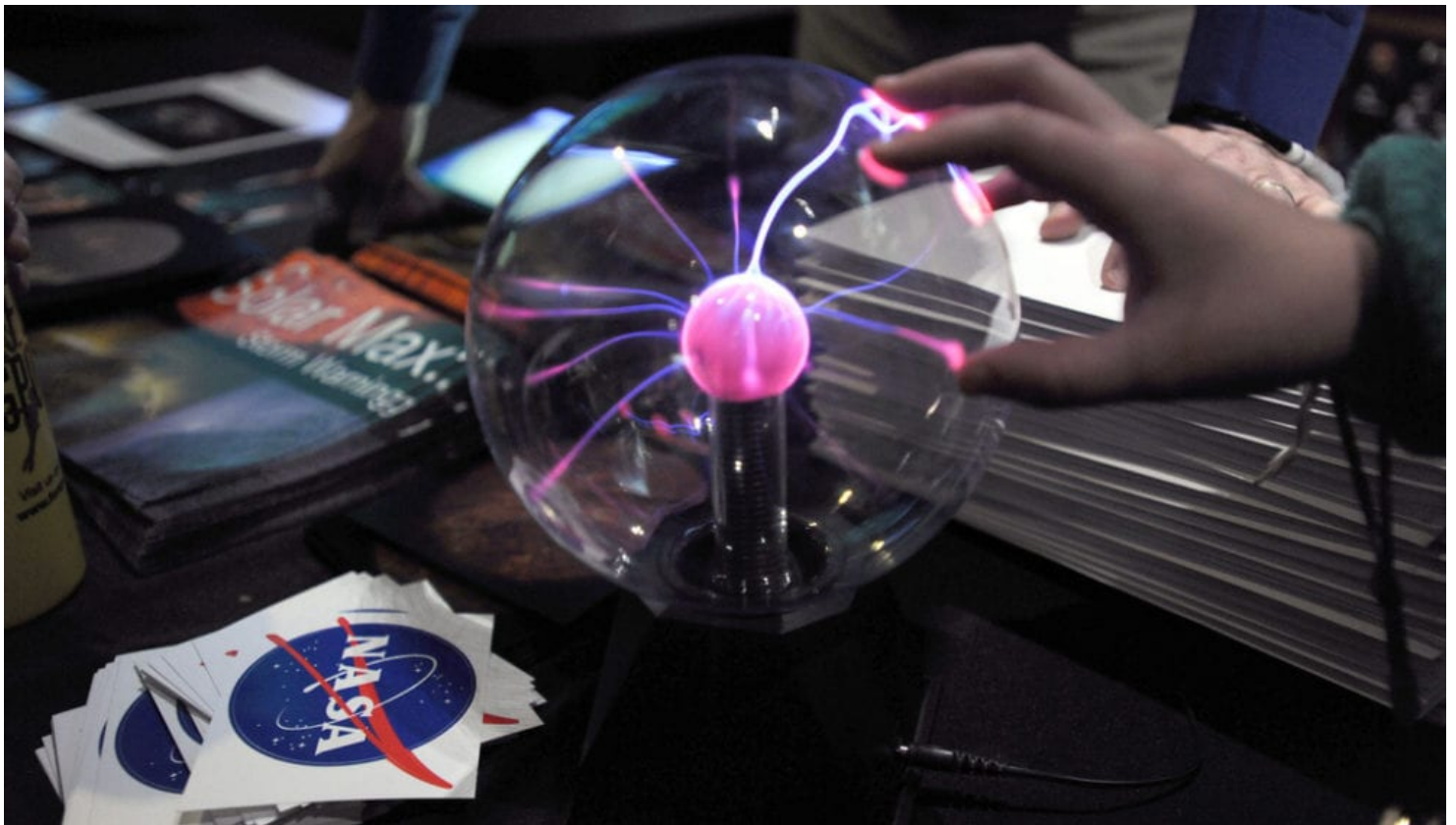


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# Can visiting science centres boost science literacy?



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**By: Luisa Massarani**

The expectations that hands-on science centres can increase people's engagement with science and technology have been the motivation for creating many science centres around the world.

But studies that show the societal impact of science centres — visited by some 300 million people a year globally — have so far been lagging behind.

Now, the results of a new study presented at the Science Centres World Summit last week (17-19 March), in Mechelen, Belgium, reveal that people who visit such centres are more engaged with science than those who do not.

The study was conducted in 17 science centres from 13 countries. It finds a correlation between people visiting a science centre and science and technology knowledge, understanding, interest, curiosity and engagement.

Increased personal identity with, and confidence in science and technology were also observed. The more frequent, the longer, and the more recent the science centre experience, the stronger the correlation for all outcomes.

“This study shows that the presence of one or more healthy and active science centres within a community, region, or country represents a vital mechanism for fostering and maintaining a scientifically and technologically informed, engaged, and literate public,” the study says.

***“We now have a clear indication that science centres are a relevant tool to improve scientific literacy among our population.”***

***Vera Brudny, Programme for Popularising Science and Innovation***

But the study did not pin down causation — it may just be that people who are more engaged with science are more likely to go to science museums and centres in the first place.

“The science centre experience is cumulative,” John Falk, researcher at the Oregon State University and leader of the study, tells *SciDev.Net*. He suggests that repeat visits and experiences over a lifetime help influence interest in science.

The study included over 13,500 people in Australia, Belgium, Canada, Colombia, Finland, Mexico, Norway, Portugal, Singapore, Sweden, Taiwan, the United Kingdom and the United States.

“This international study is particularly important for our field, mostly because it provides empirical evidence of the relevance of museums and science centers for the promotion of scientific literacy,” says Rosalia Vargas, president of the Pavilion of Knowledge in Lisbon, Portugal, one of the science centres that took part in the study.

“The worldwide scale of the project and the fact that so many institutions were involved provides a reliable source of information on how to address the needs of our visitors and communities,” says Vargas, who is also the president of Ecsite, the European Network of Science Centres and Museums.

She says the findings that visits to the centres are linked to science appreciation in both young people and adults, particularly with those who have a repeated and longer visitor experiences, will have implications for practice and design of future initiatives.

Vera Brudny, coordinator of the Programme for Popularising Science and Innovation of the science ministry in Argentina, says the study is very useful for policymakers.

“Very often we need to decide where to focus our efforts and it is very important to have evidence on which to base our decisions,” she says. “The results of the study indicate that it is worth to invest our efforts in supporting science centres; we now have a clear indication that science centres are a relevant tool to improve scientific literacy among our population.”

> [Link to full study](#)

*Luisa Massarani works in Museu da Vida (Museum of Life), in Rio de Janeiro.*

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