

2006) combined 380 studies on the phenomenon, often termed psychokinesis, including data from the PEAR lab. It concluded that although there is a statistically significant overall effect, it is not consistent and relatively few negative studies would cancel it out, so biased publication of positive results could be the cause.

Robert Park, a physicist at the University of Maryland, adds that if you run any test often enough, it's easy to get the "tiny statistical edges" the PEAR team seems to have picked up. If a coin is flipped enough times, for example, even a slight imperfection can produce more than 50% heads.

In the end, the decision whether to pursue a tiny apparent effect or put it down to statistical flaws is a subjective one. "It raises the issue of where you draw the line," says sceptic Chris French, an 'anomalous psychologist' at Goldsmiths, University of London, who tries to explain what seem to be paranormal experiences in straightforward psychological terms. French thinks that even though the chances of a real effect being discovered are low, the implications of a positive result would be so interesting that work such as Jahn's is worth pursuing.

Many scientists disagree. Besides being a waste of time, such work is unscientific, they argue, because no attempt is ever made to offer a physical explanation for the effect. Park says the PEAR lab "threatened the reputation" of both Princeton and the wider community. He sees the persistence of such labs as an unfortunate side effect of science's openness to new questions. "The surprising thing is that it doesn't happen more often," he says.

William Happer, a prominent physicist at Princeton, takes the middle ground. He

believes the scientific community should be open to research that asks any question, however unlikely, but that if experiments don't produce conclusive results after a reasonable time, researchers should move on. "I don't know why this took up a whole lifetime," he says.

The status of paranormal research in the United States is now at an all-time low, after a relative surge of interest in the 1970s. Money continues to pour from philanthropic sources to private institutions, but any chance of credibility depends on ties with universities, and only a trickle of research now persists in university labs.

Elsewhere the field is livelier. Britain is a lead player, with privately funded labs at the universities of Edinburgh, Northampton and Liverpool Hope, among others. Parapsychologist Deborah Delaney at the University of Northampton suspects that the field is stronger in Britain because researchers tend to

"Parapsychologists have a hard time trying to publish in mainstream journals."

work in conventional psychology departments, and also do studies in 'straight' psychology to boost their credibility and show that their methods are sound. "We're seen to be in the same business as other psychologists," she says.

But parapsychologists are still limited to publishing in a small number of niche journals. French thinks the field is treated unfairly. "I'm convinced that parapsychologists have a hard time trying to publish in mainstream journals," he says, adding that he even has difficulty publishing his 'straight' papers on why people believe in paranormal events: "Simply because the paper mentions the word telepathy or psychokinesis, it isn't sent out to referees. People think the whole thing is a waste of time." ■

Lucy Odling-Smee

names in the New Testament.

The new sites might also provide a model for better communication among scientists, says Brent Edwards, director of the Starkey Hearing Research Center in Berkeley, California, who blogs on innovation in science. He points out that journals could use the Internet to share information and move science forward much more effectively, rather than being facsimiles of their print cousins, with static graphs and figures.

"I'm often frustrated by my inability to analyse in a different

way data that are printed in peer-reviewed publications, when I'm interested in looking at a relationship that the authors didn't think of," he says. If research organizations and journals linked the raw data behind papers to social software tools such as Swivel and Many Eyes, he argues, "it would have considerable value to the scientific community as a whole".

David Lipman, director of the US National Center for Biotechnology Information in Bethesda, Maryland agrees, adding that his centre might

explore related possibilities. He finds it ironic that scientists have been slow to adopt social software, given how useful it could be for them. "Scientists are more interested in their careers and grants than using tools that promote better communication and data sharing," Lipman says.

He's optimistic that this attitude may change in the future, however, especially as a new generation — used to communicating through social sites such as MySpace — enters research. ■

Declan Butler

SCORECARD

Australian lightbulbs
Australia, yet to sign the Kyoto Protocol, has boosted its green credentials by pledging to replace all conventional lightbulbs with energy-efficient ones.



A. PATERSON/ALAMY

DVD games
A new game called *Body Mechanics* aims to teach kids about healthy lifestyles by battling the evil Col Esterol and his cronies — while sitting in front of the television.



N. EMM/ALAMY

ON THE RECORD

"Red hot ... Better performance. Better price."

The caption accompanying a picture of a scantily clad female model featured in an advert for optical company Edmund Optics. Offended scientists of both sexes have accused the firm of insulting the scientific community.

"I always knew that a geek would make a great husband."

Minneapolis resident Melinda Kimberly, who retrieved her stolen laptop because her husband was using it to run the alien-hunting SETI@home software. The program revealed the laptop's location when it checked in with SETI's server.

NUMBER CRUNCH

£18,000 (roughly US\$35,000) was spent by the UK Ministry of Defence in 2002 to investigate the potential use of psychic powers to detect hidden objects.

12 self-proclaimed psychics declined to participate in the research, meaning the ministry had to rely on novice volunteers.

1 participant fell asleep during the study, which ultimately concluded that psychic techniques are of "little value".

Sources: news.com.au, Associated Press, CosmicVariance, BBC