Brain activity of Spanish Popular Party voters triggered by rivals
16 May 2019

The images show how the brains of PP voters experience stronger activation in the orbitofrontal cortex and the thalamus (both areas being related to risk and ambiguity) when exposed to messages about the rival party (regardless of whether the information is about corruption or positive actions). Credit: University of Granada

Scientists from the University of Granada (UGR), the Distance Learning University of Madrid (UDIMA) and Temple University (United States) have analysed the brain response of supporters of Spain's Popular Party (PP) and the Socialist Workers' Party (PSOE) when exposed to information about corruption or positive news from the rival party.

The findings of the study show that, at the cerebral level, it is more effective for Spanish political parties to design their campaigns based on information about the corruption associated with the rival party than on emphasising the positive practices of the voter's own party. The study concludes that those parties toward the social-democratic end of the spectrum, such as the PSOE, need to go to greater lengths than their opponents to ensure honest internal practices, putting a stop to possible fake news, since their entire electorate may be deeply affected by such practices—even more so than PP supporters.

Corrupt practices in the world of politics account for annual worldwide expenditure of 1.5 trillion Euros. In Spain alone, political corruption costs the public about 90,000 million Euros every year. News outlets around the world present information about corruption every day, which affects the entire political spectrum, both liberal parties (such as the PSOE) and conservatives (such as the PP). Despite the well-known economic and social consequences of corruption (such as the fact that it prevents job-creation and hinders equal opportunities), political parties employing corrupt methods do not experience any repercussions in terms of fewer votes.

Political behaviour research has traditionally studied why this is the case—that is, why messages of political corruption, or indeed of positive practices, fail to have the intended effect on the electorate. Some studies have found that a possible cause of this failure is so-called partisan bias. This arises when supporters of a given party penalize less harshly those messages of corruption that derive from within their own party—and give more credibility to any positive information about that party—compared to the news they receive about their political rivals.

This study reported here used sophisticated brain scanning techniques to ascertain how supporters of the PSOE and the PP process different messages about their own party vs. that of their opponents, specifically relating to corruption and welfare measures. It has been published in the journal...
The researchers worked with ardent PSOE and PP sympathisers, who, in terms of their level of support for their respective parties, had previously rated themselves at 9 or 10 on a scale of 1 - 10. The scientists scanned the brain activity of 10 supporters from each of the two parties while they were exposed to written messages about party corruption (and other more positive messages). The participants, in response to the messages, had to judge how much they penalized or supported the practices described.

**Corruption makes an impact on the brain**

The brain scan results suggested that messages about corruption (as opposed to the more positive messages) exerted the greatest cerebral impact on all of the participants. This is due to a number of areas of the brain being involved, specifically those relating to risk, disappointment, and rejection. When messages about corrupt practices in the PSOE vs. the PP were displayed, the study found that news of corruption in the PSOE activated those brain areas related to penalization, risk, and disappointment more markedly.

Crucially, the study reveals that, rather than responding to the positive practices implemented by their own party, supporters of both parties present a high level of biased rejection in the brain towards messages about the rival party, regardless of whether these are positive or referring to corrupt practices. This bias affected the PP voters in the sample to a greater extent, who presented a higher level of aversion, risk, and ambiguity towards the messages about the PSOE (whether they dealt with information about corruption or positive actions).

The researchers highlight the fact that these results are critical to the design of political campaigns, as the brain analysis data corroborate at the brain level the importance of implementing campaigns that are based on signalling corruption in the rival party, rather than emphasising the positive practices within the favoured party.

For the first time, the study concludes that it is essential that parties of a more social-democratic leaning (such as the PSOE) make a more concerted effort than their opponents to ensure honest internal practices and curb any possible fake news. This is because corrupt practices can have a profound effect on such a party's entire electorate—even more so than among supporters of more conservative parties.


Provided by University of Granada