Persuading with confidence: Evidence for the Confidence Heuristic

Briony D. Pulford*, Andrew M. Colman*, Eike K. Buabang[†], Eva M. Krockow*

* Department of Neuroscience, Psychology and Behaviour, University of Leicester, UK \dagger Institute of Psychology, Leiden University, Netherlands

According to the confidence heuristic, when people communicate beliefs to one another, they generally express confidence proportional to their degree of certainty, based on their relevant knowledge, and recipients tend to judge the persuasiveness of the communication according to the confidence with which it is expressed. Thomas and McFadyen (1995), who introduced the heuristic as a purely theoretical proposal, also showed mathematically that the confidence heuristic permits efficient exchange of information between decision makers with common interests, and that it reliably implements optimal solutions to interactive decisions characterized by shared preferences technically, common-interest games-and asymmetric information. Examples include life partners deciding between different houses to buy or politicians choosing between political leaders, where agreement is preferable to disagreement, and some jointly agreed alternatives are typically preferable to others, but the individuals involved have different information about the available alternatives. Previous experiments have investigated the confidence-persuasiveness aspect of the heuristic but not the full knowledge-confidence-persuasiveness hypothesis, and have focused on individual rather than collective decision making. We report 3 experiments to test the confidence heuristic using incentivized interactive decisions with financial outcomes in which participants attempted to identify target stimuli after conferring with a partner who was also seeking the right answer and who had either stronger or weaker information about the target. Experiment 1, using a facial identification task, confirmed the confidence heuristic and showed optimal joint decisions 60.5% of the time. Both quantitative and qualitative analyses were performed. The repeatedmeasures design controlled for individual differences influencing the results. Experiment 2, using geometric shapes as stimuli, found a much larger confidence heuristic effect yielding 85.8% optimal joint decisions. Experiment 3 found similar confidence heuristic effects (84.8% optimal joint decisions) through face-to-face and computer-mediated communication channels, suggesting that verbal rather than nonverbal communication drives the heuristic. The verbal protocols revealed that suggesting an answer first was typical of pair members with strong evidence, and this may therefore be a dominant cue that persuades. In our experiments, pair members with strong evidence tended to be more confident and more persuasive than their partners with weak evidence, confirming the complete knowledge-confidence-persuasiveness causal path implied by the heuristic in commoninterest games with asymmetric information. Our results establish the confidence heuristic with dissimilar classes of stimuli and through different communication channels.