

**Abstract**

This study contributes to the ongoing discussion on the appropriate measurement of overconfidence, in particular, its strictly incentive compatible measurement in experiments. Despite a number of significant advances in recent research, several important issues remain to be solved. These relate to the strictness of incentive compatibility, the identification of well-calibrated participants, the trichotomous classification into over- or underconfident and well-calibrated participants, and the generalization to measuring beliefs about the performance relative to other people. This paper develops a measurement of overconfidence that is improved regarding all four of these issues. We theoretically prove that our method is strictly incentive compatible and robust to risk attitudes within the framework of Cumulative Prospect Theory. Furthermore, our method allows the measurement of various levels of overconfidence and the direct comparison of absolute and relative confidence. We tested our method, and the results meet our expectations, replicate recent results, and show that a population can be simultaneously overconfident, well-calibrated, and underconfident. In our specific case, we find that more than ninety-five percent of the population believe to be better than twenty-five percent; about fifty percent believe to be better than fifty percent; and only seven percent believe to be better than seventy-five percent.