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Effective utilization of anchor-biased estimates for the wisdom of crowds

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Abstract

We propose a method to use anchor-biased numerical estimates to enhance the wisdom of the crowd (i.e., aggregating individual estimates becomes more accurate). We predicted that better wisdom of crowds could be achieved by combining estimates affected by two sufficiently different anchors. We conducted a behavioral experiment on anchoring effects and computer simulations of the wisdom of crowds. The behavioral experiment revealed that anchor-biased estimates did not always produce larger errors but produced more accurate or less accurate estimates depending on the relationship between the anchor and true values. We also found that even in the absence of anchoring effects, the estimates were biased. The results of computer simulations revealed that robust and better wisdom of crowds could be achieved using the proposed method. Contrastingly, aggregating estimates that were not biased by anchors did not always lead to better wisdom of crowds.