

DISSERTATION PROPOSAL

**“A Simple Remedy for Overprecision in Judgment”**

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Overprecision is the excessive certainty regarding the accuracy of one’s predictions or beliefs. Despite being the most robust and most widely-studied form of overconfidence, overprecision is still considered the least understood type, and is particularly impervious to debiasing. This dissertation will focus on developing a new method that may significantly reduce this bias, and shed some light on its underlying mechanism.

The first chapter will present the Subjective Probability Interval EStimates (SPIES) method. This method works by forcing participants to consider all possible outcomes. The judge is presented with the entire range of values divided into intervals, and estimates each interval’s likelihood of including the true answer. Thus, the judge takes into consideration values that may have been overlooked when making the estimate in a different way. Results of two studies show that estimates elicited using SPIES displayed less overprecision than those elicited using the traditional confidence interval method. In addition, the effect of SPIES carried over to subsequent confidence interval estimates, making these estimates more inclusive. These results demonstrate that the effect of SPIES is not limited to the presentation format of the estimate, but is rather driven by a change in the cognitive process by which estimates are made.

In the second chapter, I will suggest and test four possible mechanisms by which SPIES reduce overprecision. One suggestion focuses on the accessibility of estimate-relevant information in memory. According to this hypothesis, the consideration of all possible outcomes may make relevant evidence more accessible in memory, and facilitate its inclusion in subsequent estimates. A second alternative is that the more inclusive interval estimates made after SPIES are the result of a more extensive search for information, primed by the SPIES task. If this is so, then limiting the judge’s ability to conduct an extensive search for information (i.e., by applying time pressure) should reduce the effect of SPIES. The third hypothesis focuses on the presentation of extreme values in the SPIES task, and speculates that these extreme values generate an anchoring effect on subsequent interval estimates. The fourth and final hypothesis that will be tested in this dissertation deals with changes in the judge’s confidence that her initial estimate is accurate, and her willingness to bet on this accuracy. I will examine a) whether SPIES are a more reliable measure of the judge’s sense of confidence in the accuracy of her estimates; b) whether SPIES reduce judges’ overconfidence in their own ability to make accurate estimates, measured by their willingness to risk a penalty for inaccuracy.

The mechanisms proposed in this dissertation will be tested in five experiments. Combined, these studies will help develop a useful instrument for improving estimates and predictions, and will advance our understanding of the overprecision bias.