Trust yourself! Or maybe not: factors related to overconfidence and uncertainty assessments of software effort estimates

Supplementary material

In this document, we list and describe the metrics we classified under the label "other", related to the measurement strategies that we found:

- Measuring the ARPI (Actual effort Relative to Prediction Interval), that defines the distance between the actual effort and the midpoint of the prediction interval, normalized by the prediction interval width [4].
- Asking participants for the probability of project success as a way to measure their confidence levels [3].
- Evaluating the interval skew because it provides complementary insight about the realism of uncertainty assessments [2]. Right-skewed cost distributions are more realistic than left-skewed ones. It is calculated as the distribution mean divided by the most likely estimate [2]. The distribution mean is calculated using the PERT formula: (minimum value + 4*most likely value + maximum value).
- Calculating the correlation between confidence levels and accuracy (MRE) to identify the usefulness of confidence levels as indicators of estimation errors [1]. This metric was compared with the width-accuracy correlation we reported before.
- Calculating the ratio of remaining actual duration over remaining estimated duration in different project phases to understand more of the reduction (or lack of it) of uncertainty as a project progresses [5].

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