

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

Supplementary material

In this document, we provide more details about our research method. We inform the oracle that we used in our Systematic Literature Mapping (SLM) and the full set of inclusion and exclusion criteria.

1. Oracle

In Table 1, we present the complete list of papers that we used to form our oracle.

Table 1 – Oracle used.

Paper title	Reference
Better sure than safe? Overconfidence in judgement based software development effort prediction intervals	[4]
Uncertainty intervals versus interval uncertainty: an alternative method for eliciting effort prediction intervals in software development projects	[5]
Realism in assessment of effort estimation uncertainty: it matters how you ask	[1]
Eliminating overconfidence in software development effort estimates	[3]
Combination of software development effort prediction intervals: why, when and how?	[2]

2. Inclusion and exclusion criteria

In Table 2, we present the Inclusion Criteria (IC) and Exclusion Criteria (EC) that we used to select the papers to our SLM.

Table 2 - Complete list of inclusion and exclusion criteria.

ID	Criteria
IC 01	The paper reports one or more factors related to the overconfidence of estimators in the context of expert judgment estimation.
IC02	The paper reports one or more factors related to the uncertainty assessment of estimates in the context of expert judgment estimation.
EC01	The paper is not about software estimation, or it is about software estimation but does not focus on overconfidence or uncertainty assessment.
EC02	The paper is about software estimation other than judgment-based.
EC03	The paper is a literature review (systematic or not), lessons learned, or opinion paper and does not report empirical results regarding factors related to the overconfidence effect or the uncertainty assessment of estimates.
EC04	The paper is about expert judgment estimation and even cites the overconfidence effect or the uncertainty assessment of estimates, but does not report any related factor.
EC05	The paper presents non-peer-reviewed results.
EC06	The paper is not written in English.
EC07	The paper is not accessible in full-text online.
EC08	The study is published as a book or grey literature.
EC09	The paper is a duplicate or a previous version of another already selected paper.
EC10	The paper does not describe the factors to allow for categorization.

References

- [1] M. Jorgensen. 2004. Realism in assessment of effort estimation uncertainty: it matters how you ask. *IEEE Transactions on Software Engineering* 30, 4 (April 2004), 209–217.
DOI:<https://doi.org/10.1109/TSE.2004.1274041>

- [2] Magne Jørgensen and Kjetil Moløkken. 2002. Combination of software development effort prediction intervals: why, when and how? In *Proceedings of the 14th international conference on Software engineering and knowledge engineering (SEKE '02)*, ACM, Ischia, Italy, 425–428. DOI:<https://doi.org/10.1145/568760.568833>
- [3] Magne Jørgensen and Kjetil Moløkken. 2004. Eliminating Over-Confidence in Software Development Effort Estimates. In *Product Focused Software Process Improvement (Lecture Notes in Computer Science)*, Springer, Berlin, Heidelberg, 174–184. DOI:https://doi.org/10.1007/978-3-540-24659-6_13
- [4] Magne Jørgensen, Karl Halvor Teigen, and Kjetil Moløkken. 2004. Better sure than safe? Over-confidence in judgement based software development effort prediction intervals. *Journal of Systems and Software* 70, 1 (February 2004), 79–93. DOI:[https://doi.org/10.1016/S0164-1212\(02\)00160-7](https://doi.org/10.1016/S0164-1212(02)00160-7)
- [5] Magne Jørgensen and Karl-Halvor Teigen. 2002. Uncertainty Intervals Versus Interval Uncertainty: an Alternative Method for Eliciting Effort Prediction Intervals in Software Development Projects. Singapore, 343–352.