

**REFEREE REPORT ON THE REVISED VERSION OF:
BEHAVIORAL MEASURES AND THEIR CORRELATION
WITH IPM ITERATION COUNTS ON SEMIDEFINITE
PROGRAMMING PROBLEMS.**

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As stated in the first report, the paper shows interesting computational results regarding the potential explanatory value of different condition measures for SDP problems and its actual computational difficulty. The authors have followed the same approach of its previous research applied to linear programming.

The authors have addressed all major observations posed in my previous review and I believe the paper is now ready for publication. In the following I briefly comment on the observations, following the authors enumeration:

1. Regarding the topic of degeneracy and non-strict complementarity, I am willing to agree now with the authors, although the topic is extending the paper. The analysis carried out to measure the extent of non-degeneracy is very interesting. It is true that the results open future research possibilities on the actual connection between convergence rates and strict complementarity and degeneracy. The actual implementation of the algorithm might have an effect here: it has to be noted that software developments are not always equal to the theoretical algorithm we use for the convergence analysis. Further research might consider these points.
2. The authors performed further experiments studying correlation with

other expressions involving $\log(C(d))$. The results show correlations which are actually worse than with $\log(C(d))$ alone, which is interesting considering the theoretical prediction. Again, I believe that the specific algorithmic implementation has an effect on this, “dumping” the effect on the dimensions.

Regarding the specific comments, they were addressed appropriately. Regarding the proof of Proposition 2, now I agree with the authors. Regarding point 5, I failed, in fact, to word adequately my comment on the selection of ϵ , but the authors understood the idea and the development is complemented by their observation that the terminating gap become active only under large precision.