

Correction of Table I of submission to IEEE Transactions on Intelligent Transportaion Systems

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This report intends to fix an error in the values reported to validate the simulator described in the first version of our paper titled **Cycling meets Technology:A Cooperative Cycling Cyber-physical System**.

We appreciate the comments of reviewer 1, who pointed out that “the simulated results are in fact too optimistic to be regarded as reliable or realistic”. We revisited the datasets and estimations of the empirical studies and the simulator, and we found out that we made a mistake reporting the wrong empirical studies. The results written in *Table I. Comparison of precision and accuracy from experiments and simulations* are from a preliminary calibration dataset.

The validation procedure we followed was to compare how close were the results of *precision* (renamed *consistency* in the reviewed edition of the paper) and *accuracy* obtained from both actual leader-follower cyclists and the simulator. We first calibrated our apparatus collecting and analyzing data from several preliminary trials. Then, we ran the experiment with ten pairs of subjects. By mistake, the empirical studies reported correspond to results of filtered calibration measurements, instead of the actual final measurements.

The corrected table now reflects a difference of 6.1% in consistency and -8.2% in accuracy. This means that simulated ciclysts are slightly more consistent yet less accurate than actual cyclists.

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Herein we confirm the existance of two datsets named *preliminary* and *final*, and we made them available for reviewers scrutiny at http://github.com/jsalam/datasets_TransactionsITS. The following are some descriptive statistics of both datasets.

Descriptive statistics of preliminary dataset

Dataset: preliminary.csv

Table 1: Main descriptive statistics of preliminary dataset

Bicycle	Data points	Average CACC m/s ²	Average speed	Average acc. m/s ²
leader	199	NA	3.248	0.018
follower	198	0.251	3.046	0.013

Table 2: Consistency and accuracy of preliminary dataset filtered with 1 SD

Hits	Miss	Data points	Precision	Average Accuracy	SD Accuracy
115	83	198	0.581	0.414	0.482

Descriptive statistics of final dataset

Dataset: final.csv

Table 3: Main descriptive statistics of final dataset

Bicycle	Data points	Average CACC m/s ²	Average speed	Average acc. m/s ²
follower	570	-0.001	3.329	0.016

Table 4: Consistency and accuracy of final dataset unfiltered

Hits	Miss	Data points	Precision	Average Accuracy	SD Accuracy
363	207	570	0.637	0.241	0.31

R Project: *Study5A verificacion datos Alexis.Rproj*.