Decision on your submission to Accident Analysis and Prevention

Helai Huang (Accident Analysis and Prevention) <EviseSupport@elsevier.com>   Sat, Jun 6, 2020 at 7:15 AM
Reply-To: "aaphuang@csu.edu.cn" <aaphuang@csu.edu.cn>
To: "Paez, Antonio" <paezha@mcmaster.ca>

Ref: AAP_2020_307_R1
Title: A systematic assessment of the use of opponent variables, data subsetting and hierarchical specification in two-party crash severity analysis
Journal: Accident Analysis and Prevention

Dear Dr. Paez,

Thank you for submitting your manuscript to Accident Analysis and Prevention.

I have completed my evaluation of your manuscript. The reviewers recommend reconsideration of your manuscript following revision. I invite you to resubmit your manuscript after addressing the comments below.

When revising your manuscript, please consider all issues mentioned in the reviewers' comments carefully: please outline in a cover letter every change made in response to their comments and provide suitable rebuttals for any comments not addressed. Please note that your revised submission may need to be re-reviewed.

If you would like to revise your manuscript, you first need to accept this invitation:

- Log into EVISE® at: http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=AAP;
- Locate your manuscript under the header 'My Submissions that need Revisions' on your 'My Author Tasks' view; and
- Click on 'Agree to Revise'.

Upon agreeing to revise your manuscript, your revision deadline will be displayed in your 'My Author Tasks' view.

When you are ready, please submit your revision by logging into EVISE® at: http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=AAP

Accident Analysis and Prevention values your contribution and I look forward to receiving your revised manuscript.

Kind regards,

Helai Huang
Co Editor-in-Chief
Accident Analysis and Prevention

Editor and Reviewer Comments:
-**Reviewer 1**

  - No comment to authors.

-**Reviewer 3**

  - This paper is very well done and the revisions have improved it even further.

-**Reviewer 4**

  -

1. Authors mentioned that the WAPE are still less than one percent for every model/ensemble of models in Table 6. This is true. But it does not change the fact that the models are overfitting. If you evaluate the model performances based on

other criteria, the in-sample and out-of-sample performances might be quite different. As such, these models might be biased.

2. I'm very confused by the calculation process of "percent correct". Not sure if it is a proper performance measure. As the authors mentioned, that crash data is highly imbalanced. In this case, there are other performance metrics which are more adapted into imbalanced data problem, such as ROC, G-mean, or F-measure. You can refer to the following paper

Learning from class-imbalanced data: Review of methods and applications

https://www.sciencedirect.com/science/article/pii/S0957417416307175

Have questions or need assistance?
For further assistance, please visit our Customer Support site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.