Nicholas Horton

Editor

Journal of Statistics and Data Science Education

May 3rd, 2024

Dear Dr. Horton,

We would like to submit the attached manuscript entitled “Experiential learning with 3D data visualizations in an introductory statistics course” for consideration in Journal of Statistics and Data Science Education. We believe that the manuscript will be of interest to Journal of Statistics and Data Science Education because we aim to advance the works in data visualizations by incorporating our research as a classroom project for statistics students.

The focus of our manuscript is on a classroom project surrounding a data visualization experiment. We provide students of an introductory statistics course with a series of reflections that gather information on how the students perceive the objectives of active research. After participating in the experiment, students were asked about what research objectives we were testing. We then provided students with an extended abstract and video presentation; students were asked to comment on what was clearer than when they participated in the experiment. Our overall results show that students had a wide variety of answers when guessing the research objectives, as well as generally enjoying the progressively revealing nature of the research project.

Students in introductory statistics courses are rarely exposed to the full scope of research and where the role of statistics falls in modern science. The project that we discuss serves a dual purpose of accessing a large convenient sample for statistical experiments while simultaneously providing students with a holistic view of the research process using an approachable topic.

We suggest the following possible reviewers:

Dr. Diane Cook, Monash University, [dicook@monash.edu](mailto:dicook@monash.edu)

Dr. Heike Hofmann, Iowa State University, [hofmann@iastate.edu](mailto:hofmann@iastate.edu)

Dr. Kiegan Rice, NORC at the University of Chicago, [rice-kiegan@norc.org](mailto:rice-kiegan@norc.org)

Our research is without financial conflicts of interest. We have not submitted this manuscript to another journals for publication. The research was approved by Institution Review Board, Project ID: 22579

Sincerely,

Tyler Wiederich, Ph.D. student; Susan VanderPlas, Assistant Professor

University of Nebraska-Lincoln

Department of Statistics