

1159-62-187

Xiaogang Su*, 500 W. University Ave., El Paso, TX 79968, and **Youngjoo Cho, Liqiang Ni, Lei Liu** and **Elise Dusseldorp**. *Refined Moderation Analysis with Categorical Outcomes*. Preliminary report.

Concerning moderation analysis with categorical outcomes, we start with an interesting observation, which shows that heterogeneous treatment effects could be equivalently estimated via a role exchange between the outcome and the treatment variable. The result holds for both experimental data and observational data, yet with an important difference in interpretation. On this basis, we explore two methods of obtaining more efficient estimators of the moderating effects. One approach is to combine two estimators while the other involves a joint estimator. Refined statistical inference can be made accordingly. The improved efficiency is helpful in addressing the lack-of-power problem that is common in search for moderators. We investigate the proposed method by simulation and provide an illustration with data from a randomized trial concerning wart treatment. (Received August 04, 2020)