

DEPARTMENT OF STATISTICS



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Statistical Issues Arising in Equal Employment Cases

Wednesday, September 22, 2021

11:45 AM EST

Zoom Meeting: Meeting ID: 924 8283 7055

Password: 378160

<https://rutgers.zoom.us/j/92482837055?pwd=TktKVVU2Z1JzZnZQbm1TNUU3K0pmZz09>

Virtual Coffee session before the seminar at 11:30 AM EST

Abstract:

This talk discusses statistical issues occurring in disparate impact and disparate treatment cases, the two forms of equal employment cases. The first part of the talk concentrates on issues involving the two-step selection process typically used in disparate impact cases. A new two-step test is proposed and is shown to have high power to detect disparity when the scores of two groups have different spreads. The second part of the talk discusses issues arising in *Dukes v. Wal-Mart II*, a class action disparate treatment case. The Supreme Court was concerned that the observed disparity in the aggregated data may have been due to a few bad stores instead of being a common practice of the entire company. An analog of the Breslow-Day homogeneity test and the fact that most districts had an odds ratio less than one suggest that the data were consistent with a common pattern that woman had lower odds of being promoted to the Management Trainee position than men.

Bio:

Weiwen Miao obtained her bachelor's degree from Peking University. She got her Ph.D in mathematics from Tufts University. Upon graduation, Weiwen taught statistics at several liberal arts colleges. Currently she is a professor at Haverford College in Pennsylvania. Her main research area is the application of statistical methodology in the law. She was selected as a ASA fellow in 2021.

