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Comment

Delores A. Conway

Gray's article addresses statistical problems and concerns prevalent in legal cases of employment discrimination. Although she focuses on universities and the academic environment, the statistical issues apply to more general employment settings. In particular, the treatment of outliers, omitted variables, measurement issues, selection of variables, delineation of the population and comparison across competing groups arise in most legal cases of employment discrimination (Finkelstein, 1980). These problems expose the heart of statistical evidence and determine its probative value in legal settings.

One of the strengths of the paper lies in the numerous citations to actual legal cases that illustrate the use of specific methods. Gray notes that similar statistical results may be probative in one case and completely dismissed in another. Tabulated results from two legal cases illustrate the interplay between the legal and statistical issues when assessing employment discrimination at universities.

I commend the author for a careful and comprehen-

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sive discussion of the legal and statistical issues. This paper should be especially useful to practitioners and provides a checklist of problems to be addressed in the development of statistical evidence. My comments attempt to clarify and extend the discussion, as well as provide an economic perspective. The multiple regression framework shows how the statistical issues are interrelated and how summaries change with different viewpoints of the data. Two examples from legal cases illustrate the statistical complexities in assessing discrimination across different job structures within an organization. We conclude with some additional comments on the role of statistical evidence in Title VII legal cases.

STATISTICAL MODELS AND JOB STRUCTURES

Gray lists many of the considerations in the use of statistical methods to measure discrimination. Although they are presented in a somewhat isolated fashion, many of the statistical difficulties are interrelated. Solutions to one set of problems often resolve or magnify others.

The development of appropriate statistical models for Title VII cases is not a simple matter, because of the lack of a clear, causal model of the employment process and of limitations from observational data.