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**Jennifer M. Wilson\*** ([wilsonj@newschool.edu](mailto:wilsonj@newschool.edu)), Eugene Lang College, The New School for Liberal Arts, 65 W. 11 St., New York City, NY 10011, and **Michael A. Jones** ([jonesm@mail.montclair.edu](mailto:jonesm@mail.montclair.edu)), Department of Mathematical Sciences, Montclair State University, 1 Normal Ave., Montclair, NJ 07043. *Multilinear Extensions and Semivalues for Multichoice Games.*

We define multilinear extensions and semivalues for multichoice games. By generalizing probabilistic interpretations of the Banzhaf and Shapley values of simple games, we use multilinear extensions to define multichoice analogs of these well-known semivalues. We relate our Shapley value to others in the literature by comparing their axiomatic characterizations. We explore how the rankings of these semivalues can differ for the same multichoice game. (Received September 19, 2007)