Discrimination or differing model structures?

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Authors: Zhao, Bojuan B. | Shyr, Yu;

Affiliations: Tianjin University of Finance and Economics, Tianjin 300222, P.R. China | Division of Cancer Biostatistics, Department of Biostatistics; Cancer Biostatistics Center, Vanderbilt-Ingram Cancer Center; Vanderbilt University School of Medicine, Nashville, TN 37232-6848, USA | National Cheng Kung University, Taiwan

Note: [] Corresponding author. Tel.: +1 615 936 2572; Fax: +1 615 936 2602; E-mail: yu.shyr@vanderbilt.edu

Abstract: The Blinder-Oaxaca (B-O) decomposition has been widely used in continuous outcome comparisons between two groups of people; however, controversies and limitations with this method remain. In this paper, operating under the same-model structure, we suggest employing a multiple regression using a dummy variable to represent discrimination, and we compare this strategy with results obtained from a B-O decomposition and a Neumark decomposition, both in theory and using a simulation study. In addition, we extend these methods to cover binary outcomes.

Keywords: Blinder-Oaxaca decomposition, Neumark decomposition, multiple regression, discrimination

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