The Strengths and Limitations of the Statistical Modeling of Complex Social Phenomenon: Focusing on SEM, Path Analysis, or Multiple Regression Models

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Abstract : This paper analyzes the conceptual framework of three statistical methods, multiple regression, path analysis, and structural equation models. When establishing research model of the statistical modeling of complex social phenomenon, it is important to know the strengths and limitations of three statistical models. This study explored the character, strength, and limitation of each modeling and suggested some strategies for accurate explaining or predicting the causal relationships among variables. Especially, on the studying of depression or mental health, the common mistakes of research modeling were discussed.