A PRACTICAL INTRODUCTION TO REGRESSION DISCONTINUITY DESIGNS: FOUNDATIONS

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A Practical Introduction to Regression Discontinuity Designs: Foundations

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Abstract: In this Element and the accompanying Element, A Practical Introduction to Regression Discontinuity Designs: Extensions, Matias D. Cattaneo, Nicolás Idrobo, and Rocío Titiunik provide an accessible and practical guide for the analysis and interpretation of Regression Discontinuity (RD) designs that encourages the use of a common set of practices and facilitates the accumulation of RD-based empirical evidence. In this Element, the authors discuss the foundations of the canonical Sharp RD design, which has the following features: (i) the score is continuously distributed and has only one dimension, (ii) there is only one cutoff, and (iii) compliance with the treatment assignment is perfect. In the second Element, the authors discuss practical and conceptual extensions to the basic RD setup.

Keywords: Regression Discontinuity Design, Program Evaluation, Sharp Regression Discontinuity Design, RD Design

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